

73049-1

1/16/2013

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, D.C. 20460

OFFICE OF CHEMICAL SAFETY  
AND POLLUTION PREVENTION

Maria Pilar Herrero  
Valent Biosciences Corporation  
870 Technology Way  
Libertyville, IL 60048

JAN 16 2013

Subject: Label Amendment to Add More Crops to the Label and Create Sub-Label Specifically for Corn and Include Supplemental Labels for Avocado, Coffee, Corn, Soybean, and Pre-Plant Application  
Product Name: ProGibb 40%  
EPA Reg. No: 73049-1  
Your Submission Dated September 21, 2012

Dear Ms. Herrero:

The amendment referred to above, submitted in connection with registration under FIFRA section 3(c)(5), is acceptable provided that you:

1. Submit and/or cite all data required for registration/reregistration of your product under FIFRA section 3(c)(5) when the Agency requires all registrants of similar products to submit such data.
2. Submit five (5) copies of your final printed labeling before you release the product for shipment. Final printed labeling means the label or labeling of the product when distributed or sold. Clearly legible reproductions or photo reductions will be accepted for unusual labels, such as those silk-screened directly onto glass or metal containers or large bags or drum labels.

If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA section 6(e). Your release for shipment of the product bearing the amended labeling constitutes acceptance of these conditions. Should you have any questions regarding this action, you may contact Gina Burnett at (703) 605-0513 or via email at [burnett.gina@epa.gov](mailto:burnett.gina@epa.gov). A stamped copy of the label is enclosed for your records.

Sincerely,

  
Linda A. Hollis, Chief  
Biochemical Pesticides Branch  
Biopesticides and Pollution  
Prevention Division (7511P)

CONCURRENCES							
SYMBOL	▶ 7511P						
SURNAME	▶ Burnett						
DATE	▶ 1/15/13						

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**MASTER LABEL**

**Primary Product Name: ProGibb® 40% Plant Growth Regulator, Water Soluble Granule**

Sublabel I: ProGibb® 40%, Plant Growth Regulator, Water Soluble Granule;  
For agricultural use on artichoke, avocado, banana, blueberry, carrot, celery, cherries, citrus, coffee, collard greens, cotton, cucumber, grapes, dry bean, hops, Italian prune, lettuce for seed, melon, mustard greens, peanut, pecan, pepper, pineapple, rhubarb, rice, soybean, spinach, stone fruit, strawberry, turnip greens, and watercress.

Sublabel II: RyzUp SmartGrass®, Plant Growth Regulator;  
For agricultural use on pastures, forage crops and corn.

Sublabel III: RyzUp SmartCorn™, Plant Growth Regulator  
For Agricultural Use on Corn

For Organic Production

**ACCEPTED**

JAN 16 2013

Under the Federal Insecticide, Fungicide,  
and Rodenticide Act, as amended, for  
the pesticide registered under  
EPA Reg. No. 73049-1

Active Ingredient	
Gibberellin A <sub>3</sub> .....	40.0% w/w
Other Ingredients.....	60.0% w/w
Total.....	100.0% w/w

Contains a total of 128 grams of Gibberellic Acid in 320 grams of product.

**KEEP OUT OF REACH OF CHILDREN**

**CAUTION**

EPA Registration No. 73049-1  
EPA Establishment No.

Valent BioSciences Corporation  
870 Technology Way, Suite 100  
Libertyville, IL 60048

Net Contents: 2.5 grams satchets, 80, 320, or 850 grams bottles (3, 12 ounces and 30 ounces bottles)  
This container will treat \_\_\_\_\_ acre at the maximum use rate, as directed for use on \_\_\_\_\_.

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**SUB-LABEL I**

***ProGibb® 40% Plant Growth Regulator, Water Soluble Granule***

For agricultural use on artichoke, avocado, banana, blueberry, carrot, celery, cherries, citrus, coffee, collard greens, cotton, cucumber, grapes, dry bean, hops, Italian prune, lettuce for seed, melon, mustard greens, peanut, pecan, pepper, pineapple, rhubarb, rice, soybean, spinach, stone fruit, strawberry, turnip greens, and watercress.

ACCEPTED

ACCEPTED

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**PROGIBB® 40%**  
**Plant Growth Regulator**  
**Water Soluble Granule**

For Organic Production

Active Ingredient	
Gibberellin A <sub>3</sub> .....	40.0% w/w
Other Ingredients.....	60.0% w/w
Total.....	100.0% w/w

Contains a total of 128 grams of Gibberellic Acid in 320 grams of product.

**KEEP OUT OF REACH OF CHILDREN**

**CAUTION**

See inside booklet for Precautionary Statements.

EPA Registration No. 73049-1

EPA Establishment No.

Valent BioSciences Corporation

870 Technology Way, Suite 100

Libertyville, IL 60048

1-847-968-4700

Net Contents: 2.5grams, 80 grams, 320 grams, and 850 grams (0.09, 3, 12 and 30 ounces.)

This container will treat \_\_\_\_\_ acre at the maximum use rate, as directed for use on \_\_\_\_\_.

<b>FIRST AID</b>	
If in eyes	<ul style="list-style-type: none"> <li>• Hold eye open and rinse slowly and gently with water for 15-20 minutes.</li> <li>• Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.</li> <li>• Call a poison control center or doctor for treatment advice.</li> </ul>
If on skin or clothing	<ul style="list-style-type: none"> <li>• Take off contaminated clothing.</li> <li>• Rinse skin immediately with plenty of water for 15-20 minutes.</li> <li>• Call a poison control center or doctor for treatment advice.</li> </ul>
<b>HOT LINE NUMBER</b>	
Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also call toll-free 1-800-892-0099 (24 hours) for emergency medical treatment and/or transport emergency information. For all other information, call 1-800-6-Valent.	

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**PROGIBB® 40%**  
**Plant Growth Regulator**  
**Water Soluble Granule**

For Organic Production

Active Ingredient	
Gibberellin A <sub>3</sub> .....	40.0% w/w
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Total.....	100.0% w/w

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EPA Registration No. 73049-1  
EPA Establishment No.

Valent BioSciences Corporation  
870 Technology Way, Suite 100  
Libertyville, IL 60048  
1-847-968-4700

Net Contents: 2.5 grams

Please see Box or Pamphlet for Precautionary Statements and Directions For Use

## PRECAUTIONARY STATEMENTS

### HAZARDS TO HUMANS & DOMESTIC ANIMALS

Caution: Causes moderate eye irritation. Harmful if absorbed through skin. Avoid contact with skin, eyes or clothing. Wash thoroughly with soap and water after handling. Remove and wash contaminated clothing before reuse.

#### Personal Protective Equipment (PPE)

Applicators and other handlers must wear:

- Long-sleeved shirt and long pants.
- Waterproof gloves.
- Shoes plus socks.

Follow the manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

#### User Safety Recommendations

Users should:

- Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.
- Remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

#### ENVIRONMENTAL HAZARDS

For terrestrial uses: Do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate water when cleaning or disposing of equipment washwaters or rinsate.

Do not use treated seed for food, feed, or oil purposes. Exposed treated seed may be hazardous to birds and other wildlife. Treat only those seeds needed for immediate use and planting. Do not store excess treated seed beyond planting time. Dispose of all excess treated seed and seed packaging by burial away from bodies of water.

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## DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling. Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the State or Tribe agency responsible for pesticide regulation.

### AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR Part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE), and restricted-entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 4 hours *unless wearing appropriate PPE*.

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water is:

- Coveralls.
- Waterproof gloves.
- Shoes plus socks.

## GENERAL DIRECTIONS FOR USE

Use only as directed. Read the label thoroughly and make sure it is understood before making applications. Keep out of reach of children.

### Application Instructions:

- ProGibb® 40% water soluble granule contains gibberellic acid which is an extremely potent plant growth regulator; when applying plant growth regulators, deviations from the label directions in the rates, timings, water volumes, or the adoption of untested spray mixes, results in undesirable effects. Always consult the local Valent representative in your area for the spray regimen best suited to your conditions.
- Do not apply to plants under pest, nutritional, or water stress.
- Avoid drift or accidental application to other crops.
- When a range of rates is indicated, use the concentration and spray volume indicated by the local Valent representative.
- For optimum effectiveness, thorough spray coverage of the target area must be achieved. Prepare solution concentrations by mixing the required amount of product with water in a clean, empty spray tank. Discard any unused spray material at the end of each day following local, state or federal law.
- For most efficacious results, the use water with a pH of 4.0 to 8.5. Use buffer for water with pH above or below this range.
- Applications made under slow drying conditions (cool to warm temperatures, medium to high relative humidity, and no wind) will increase absorption of the active ingredient by the plant, thus optimizing effectiveness. Night-time applications are encouraged when day-time conditions are not conducive to slow drying conditions.
- Rain fastness: Re-apply if significant rain occurs within 2 hours of application.
- Compatibility: When considering tank mixing with other products, use the following compatibility jar test before mixing a whole tank.
- Start with a clear glass or plastic quart jar. Add water from the same water source that will be used for the larger tank mix. Add the pesticides in correct proportions. Mix thoroughly and let stand for a minimum 15 minutes. Heat, separation, gelling are all signs of incompatibility. Before using any mixes that pass the jar tests for compatibility, it is imperative to test the mixture on a designated area as it may result either in phytotoxicity or ineffectiveness. For further information, consult your local Valent representative.
- For aerial applications spray volumes must be greater than 2 gallons per acre (10 gallons per acre for tree crops).
- No pre-harvest interval is required for this product.

### DIRECTIONS FOR CHEMIGATION

Fill the supply tank with the desired amount of water. Then add the amount of ProGibb® 40% required in order to achieve the final solution rate recommended for the specific crop to be treated. Agitate the mixture of ProGibb® 4% frequently during the chemigation period to assure a uniform distribution throughout the system.

Apply ProGibb® 4% continuously for the duration of the water application but do not exceed recommended rates and volumes as outlined on the product label.

**CHEMIGATION PRECAUTIONS**

Apply this product only through the following systems: Overhead sprinklers such as impact, micro-sprinklers, or booms. Do not apply this product through any other type of irrigation system. Crop injury or lack of effectiveness can result from non-uniform distribution of treated water. If you have any questions about calibration, you should contact State Extension Service specialists, equipment manufacturers or other experts. Do not connect an irrigation system (including greenhouse systems) used for pesticide application to a public water system unless the pesticide label prescribed safety devices for public water systems are in place. A person knowledgeable of the chemigation system and responsible for its operation or under the supervision of the responsible person, shall shut the system down and make necessary adjustments should the need arise. Prior to application ensure that the chemigation system meets the following requirements:

- The system must contain a functional check valve, vacuum relief valve, and low-pressure drain appropriately located on the irrigation pipeline to prevent water source contamination from backflow.
- The pesticide injection pipeline must contain a functional, automatic, quick closing check valve to prevent the flow of fluid back toward the injection pump.
- The pesticide injection pipeline must also contain a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.
- The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops.
- The irrigation line or water pump must include a functional pressure switch, which will stop the water pump motor when the water pressure decreases to the point where pesticide distribution is adversely affected.
- Systems must use a metering pump, such as a positive displacement injection pump (e.g. diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.

In addition to the above use rates and recommendations, the following precautions must be observed when using this product in any type of irrigation system.

**CHEMIGATION SYSTEMS CONNECTED TO PUBLIC WATER SYSTEMS**

Public water system means a system for the provision to the public of piped water for human consumption if such system has at least 15 service connections or regularly serves an average of at least 25 individuals daily at least 60 days of the year. Chemigation systems connected to public water systems must contain a functional, reduced pressure zone, backflow preventer (RPZ) or the functional equivalent in the water supply line upstream from the point of pesticide introduction. As an option to the RPZ, the water from the public water systems should be discharged into a reservoir tank prior to pesticide introduction. There shall be a complete physical break (air gap) between the outlet end of the fill pipe and the top or overflow rim of the reservoir tank of at least twice the inside diameter of the fill pipe. The pesticide injection pipeline must contain a functional, automatic, quick closing check valve to prevent the flow of fluid back toward the injection pump. The pesticide injection pipeline must also contain a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down. The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor

stops or in cases where there is no water pump, when the water pressure decreases to the point where the pesticide distribution is adversely affected.

Systems must use a metering pump, such as a positive displacement injection pump (e.g. diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.

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**STORAGE AND DISPOSAL**

Do not contaminate water, food or feed by storage or disposal.

**Pesticide Storage**

Keep containers tightly closed when not in use.

**Pesticide Disposal**

Wastes resulting from the use of this product must be disposed of on site or at an approved waste disposal facility.

**Container Disposal: ( 80 or 320 grams bottles)**

Non-refillable container. Do not reuse or refill this container. Triple rinse (or equivalent) promptly after emptying. Triple rinse as follows: Empty remaining contents into application equipment or mix tank. Fill container ¼ full with water and recap. Shake 10 seconds. Pour rinsate into application equipment or mix tank or store rinsate for later use or disposal. Drain for 10 seconds after flow begins to drip. Repeat this procedure two more times. Then offer for recycling or dispose of in a sanitary landfill, or incineration, if allowed by state and local authorities by burning. If burned, stay out of smoke.

**(2.5 grams sachets)**

Non-refillable container. Do not reuse or refill this container. Offer for reconditioning if appropriate or dispose of in a sanitary landfill, or incineration, if allowed by state and local authorities by burning. If burned, stay out of smoke.

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### SPRAY GUIDELINES FOR GRAPE

For all grapes, application by ground sprayer gives the most efficacious coverage. Apply as a concentrate or dilute spray in sufficient water volume to ensure complete coverage of all flower clusters or berries. For cultivar specific spray rates and timings, see accompanying tables.

### SEEDLESS TABLE GRAPE

CLUSTER STRETCH SPRAYS – SEEDLESS TABLE GRAPE			
OBJECTIVE/BENEFIT	APPLICATION TIMING		
For cluster elongation and looser cluster forms. To reduce costs of thinning, allow better air circulation to aid in the control of bunch rot, and increase light penetration to aid in sugar development.	Make one to three applications before bloom when flower clusters are 2 to 7 inches long.		
CROP/CULTIVAR	Grams A.I./Acre	Grams Product/Acre	Ounces Product/Acre
Perlette Seedless	8 – 24	20 – 60	0.7 – 2.2 oz
Flame Seedless	8 – 24	20 – 60	0.7 – 2.2 oz
Thompson Seedless	8 – 24	20 – 60	0.7 – 2.2 oz
Raisin	8 – 24	20 – 60	0.7 – 2.2 oz
Other Seedless Grapes	No indications are available at this time.		

BERRY THINNING SPRAYS - SEEDLESS TABLE GRAPE			
OBJECTIVE/BENEFIT	APPLICATION TIMING		
For decreased berry set, reduced hand-thinning costs, and hastened maturity.	Make one to four applications during bloom. Make only 1-2 applications for "Other Seedless Grapes." When the bloom period is extended, subsequent sprays are to be made 1 to 7 days after the first application.		
CROP/CULTIVAR	Grams A.I./Acre	Grams Product/Acre	Ounces Product/Acre
Flame Seedless	3 – 16	7.5 – 40	0.3 – 1.4 oz
Thompson Seedless	8 – 20	20 – 50	0.7 – 1.8 oz
Raisin	3 – 12	7.5 – 30	0.3 – 1.1 oz
Other Seedless Grapes	0.5 – 12	1.3 – 30	0.1 – 1.1 oz
<b>NOTE:</b> At the high end of the prescribed range of rates and number of applications, expect significantly more thinning in young vines or vines with high vigor. For "Other Seedless Grapes" use caution as some of the new cultivars are very responsive and over-thin easily. Consult the Valent representative or local specialist before thinning cultivars with which there is no familiarity.			

<b>BUMP SPRAY – SEEDLESS TABLE GRAPE</b>			
<b>OBJECTIVE/BENEFIT</b>		<b>APPLICATION TIMING</b>	
To help initiate the beginning of the berry growth period.		Make one application during the period between the last thinning spray and the first sizing spray.	
<b>CROP/CULTIVAR</b>	<b>Grams A.I./Acre</b>	<b>Grams Product/Acre</b>	<b>Ounces Product/Acre</b>
Thompson Seedless	16 – 24	40 – 60	1.4 – 2.2 oz

<b>BERRY SIZING SPRAYS - SEEDLESS TABLE GRAPE</b>				
<b>OBJECTIVE/BENEFIT</b>		<b>APPLICATION TIMING</b>		
For larger berries and larger clusters when used in conjunction with established girdling and thinning practices.		Make one to four applications beginning when the average berry size reaches “target” diameter (See below). Timing of the subsequent sprays will be dictated by experience in the vineyard and temperatures occurring between sprays. Sprays made after 15-20 days from the first sizing spray are less effective.		
<b>CROP/CULTIVAR</b>	<b>TARGET BERRY DIAMETER*</b>	<b>Grams A.I./Acre</b>	<b>Grams Product/Acre</b>	<b>Ounces Product/Acre</b>
Perlette Seedless	4–5 mm	32 – 128	80 – 320	2.9 – 11.5 oz
Flame Seedless	6–9 mm	20 – 128	50 – 320	1.8 – 11.5 oz
Thompson Seedless	3–5 mm	32 – 128	80 – 320	2.8 – 11.5 oz
Raisin	3–5 mm	4 – 20	10 – 50	0.4 – 1.8 oz
Other Seedless Grapes	3–14 mm	8 – 60	20 – 150	0.7 – 5.4 oz
*Target average berry diameter for the first application.				
<b>NOTE:</b> In some growing regions and for some cultivars, the higher amounts of gibberellic acid indicated will reduce fruitfulness (cluster counts) the following year. At the high end of the prescribed range of rates and number of applications, a delay in berry skin color development, sugar accumulation and overall maturation has been observed. Consult the Valent representative or local specialist before sizing cultivars with which there is no familiarity.				

<b>BERRY SIZING CLUSTER DIP - SEEDLESS TABLE GRAPE</b>			
<b>OBJECTIVE/BENEFIT</b>	<b>APPLICATION TIMING</b>		
To increase berry size.	Apply 20 - 50 ppm GA3 solution as a dip or direct spray to the cluster when berries reach 12-15 mm.		
	<b>Rate Per 5 Gallons Treatment Solution</b>		
<b>CROP/CULTIVAR</b>	<b>PPM A.I.</b>	<b>Grams Product</b>	<b>Ounces Product</b>
Seedless Grapes	20 – 50	1 – 2.5	0.1 – 0.25
<b>NOTE:</b> To prepare dip solution, add 1 – 2.5 gram ProGibb® 40% for every 5 gallons of solution needed. Consult the Valent representative or local specialist before sizing cultivars with which there is no familiarity.			

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<b>BERRY SIZING SPRAYS – SEEDED TABLE GRAPE</b>				
<b>OBJECTIVE/BENEFIT</b>		<b>APPLICATION TIMING</b>		
To increase berry size in listed cultivars; and also to reduce berry shrivel in Emperor.		Make one application during the indicated berry diameter range to the entire vine.		
<b>CROP/CULTIVAR</b>	<b>BERRY DIAMETER (mm)*</b>	<b>Rate</b>		
		<b>Grams A.I./Acre</b>	<b>Grams Product/Acre</b>	<b>Ounces Product/Acre</b>
Emperor	12 -16	20	50	1.8
Red Globe	12 -18			
Calmeria	12 -16			
Christmas Rose	12 -16			
Rogue	12 -16			
Queens	12 -15			
*Predominant average berry diameter for this application.				
<b>NOTE:</b> Whole vine applications have been known to reduce fruitfulness (cluster counts) the following year. Consult the Valent representative or local specialist before sizing cultivars with which there is no familiarity.				

<b>BERRY SIZING CLUSTER DIPS – SEEDED TABLE GRAPE</b>				
<b>OBJECTIVE/BENEFIT</b>		<b>APPLICATION TIMING</b>		
To increase berry size in listed cultivars; and also to reduce berry shrivel in Emperor.		Make one 20 - 50 ppm application during the indicated berry diameter range. Make the application as a direct spray or dip to the cluster.		
<b>CROP/CULTIVAR</b>	<b>BERRY DIAMETER (mm)*</b>	<b>Rate Per 5 Gallons Treatment Solution</b>		
		<b>PPM A.I.</b>	<b>Grams Product</b>	<b>Ounces Product</b>
Emperor	12 - 16	20 - 50	1 - 2.5	0.1 - 0.25
Red Globe	12 - 18			
Calmeria	12 - 16			
Christmas Rose	12 - 16			
Rogue	12 - 16			
Queens	12 - 15			
Other Seeded Grapes	2-3 weeks after bloom or when shatter is completed			
*Predominant average berry diameter for this application.				
<b>NOTE:</b> To prepare a 50 ppm GA3 solution, add 1 gram A.I. for every 5 gallons of dip solution needed. Consult the Valent representative or local specialist before sizing cultivars with which there is no familiarity.				

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BERRY SIZING SPRAYS – BLACK CORINTH			
OBJECTIVE/BENEFIT	APPLICATION TIMING		
To increase berry size.	Make one application 3-5 days after full bloom, but before shatter begins.		
CROP/CULTIVAR	Grams A.I./Acre	Grams Product/Acre	Ounces Product/Acre
Black Corinth (Zante Currant)	1 – 12	2.5 – 30	0.1 – 1.1

**SPRAY GUIDELINES FOR CITRUS**

- For citrus, apply in sprays of sufficient water volume to ensure thorough fruit wetting. In most cases, this application will cause some drop of oldest (most mature) leaves; this drop of older leaves is inconsequential. However, application to trees of low vigor or under stress (pest, nutritional, or water, etc) has been known to causes severe leaf and/or fruit drop.
- Dilute spray rates are expressed as the amount of product per 100 gallons of water.
- Do not apply in white wash sprays in which lime or other caustic material has produced a high pH in the spray tank. Applications of copper fungicides and/or oils within three weeks (before or after) the ProGibb® 40% application often results in significant leaf drop and fruit drop.

**CITRUS: FIELD APPLICATIONS**

CITRUS – INCREASE FRUIT SET			
CROP/VARIETY	OBJECTIVE/BENEFIT	USE RATE/ACRE	APPLICATION TIMING
Valencia, Navel and Ambersweet Orange*  *(Not for use in California)	To enhance fruit set and yield.	15 – 25 Grams A.I.  37.5 – 62.5 Grams product  1.4 – 2.3 Ounces product	Make a single dilute spray between mid December and late January using sufficient spray volume for adequate coverage of tree canopy
<b>NOTE:</b> Many blocks of Ambersweet and Navel orange in Florida tend to flower very heavily, yet set poor crops. In these blocks, it appears that tree resources are wasted by heavy flowering, compromising the trees' ability to set fruit, support early fruit growth, and carry fruit to harvest. Productivity of heavily blooming blocks is often increased by reducing flower formation.			
Clementine Mandarin	To increase fruit set and yield	1-8 Grams A.I. 2.5 – 100 Grams product  0.9 – 3.6 Ounces product	Make one to four applications from early bloom up to 4 weeks after petal fall. Allow a minimum of three days between sprays. Use a dilute spray with sufficient spray volume for adequate coverage of tree canopy between sprays.

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<p>Tangerines and Mandarin Hybrids  (Not for use in California)</p>	<p>To increase fruit set and yield.</p>	<p>8 – 30 Grams A.I.  20 – 75 Grams product  0.7 – 2.7 Ounces product</p>	<p>Make one to two applications during the bloom period. Apply as a dilute spray.</p>
<p>Grapefruit  (Not for use in California)</p>	<p>To enhance fruit set, size and yield</p>	<p>8 – 30 Grams A.I.  20 – 75 Grams product  0.7 – 2.7 Ounces product</p>	<p>Make a single application in December - January. Use a dilute spray with sufficient spray volume for adequate coverage of tree canopy. Typically 125 – 175 gallons of water per acre has been sufficient.</p>

**NOTE:** The rate and number of applications depends upon amount of desired fruit set. Generally, more fruit will be set by 2 applications (except grapefruit), earlier applications, higher rates, and climactic conditions more favorable to set. Differential responses to the PGR across citrus cultivars also interact with the above factors to affect the degree of fruit set achieved. Reductions in final fruit size are known to occur as a result of excessive fruit set. Increases in mature leaf drop occur in trees under stress.

CITRUS – REDUCE FRUIT DROP			
CROP/VARIETY	OBJECTIVE/BENEFIT	USE RATE/ACRE	APPLICATION TIMING
<p>Star Ruby Grapefruit  (Not for use in California)</p>	<p>To reduce early-season small fruit drop of Star Ruby Variety thereby increasing yields.</p>	<p>25 – 35 Grams A.I.  62.5 – 87.5 Grams product  2.3 – 3.2 Ounces product</p>	<p>Make a single dilute application during the bloom period.</p>
<p><b>NOTE:</b> Results vary from season to season depending on environmental conditions. Maintain a well-balanced fertilization and watering program.</p>			

CITRUS – DELAY RIND AGING			
CROP/VARIETY	OBJECTIVE/BENEFIT	USE RATE/ACRE	APPLICATION TIMING
Navel and other orange cultivars (except Valencia)	To delay rind aging, reduce physiological disorders (e.g., rind staining, water spotting, sticky or tacky surface, oleocellosis), and produce a more orderly harvesting pattern	16 – 48 Grams A.I. 40 – 120 Grams product 1.4 – 4.3 Ounces product	Make one or two applications as a concentrate or dilute spray.  Early application: spray approximately 2 weeks prior to color break (typically AUG. – NOV.). This timing causes the greatest delay in rind aging and produces the firmest rind possible.  AND/OR  Late application: one application after marketable color (typically OCT. – DEC.). This late spray has been known to cause re-greening.
Valencia Orange	To reduce rind creasing and to delay rind aging and softening	40 – 80 Grams A.I. 100 – 300 Grams product 3.6 – 7.2 Ounces product	Make a single application as a concentrate or dilute spray in August to October to target crop of young fruit.
<p><b>NOTE:</b></p> <ul style="list-style-type: none"> <li>Do not apply the early spray to groves that will be harvested early, as fruit coloring will be delayed. Do not apply from January through July, as production is often reduced the following year.</li> <li>Slower color development is to be expected in the target crop. Increased re-greening of mature fruit has been known to occur. After marketable color is achieved, treatment effects are reduced the longer treated fruit remain on the tree.</li> </ul>			
Tangerine Hybrids (Orlando, Robinson, Minneola, Sunburst, and others)	To delay disorders associated with rind aging, puffiness, and softening, and to increase peel strength, of tangerine hybrids	20 – 40 Grams A.I. 50 – 100 Grams product 1.8 – 3.6 Ounces product	Make one spray application two weeks prior to color break. Apply as a dilute spray.
<p><b>NOTE:</b> Do not apply if early harvest is planned. Do not apply after coloring as pre-harvest rind staining and re-greening has been known to occur. Application during coloring sometimes causes variation in rind color development.</p>			

<p>Grapefruit  (Not for use in California)</p>	<p>To delay disorders associated with rind aging (e.g., puffiness, softening, and orange coloration), prevent pre-harvest drop of mature fruit, increase peel strength, reduce water loss during storage, and produce a more orderly harvesting pattern.</p>	<p>16 – 48 Grams A.I.  40 – 120 Grams product  1.4 – 4.3 Ounces product</p>	<p>Make one or two dilute spray applications in sufficient volume to ensure coverage. Do not exceed 20 ppm A.I. (8 Grams A.I. /100 gallons) in spray solution.</p> <p>EARLY: Make application two weeks prior to color break. Apply as a dilute spray (AUG. – SEPT).</p> <p>AND/OR</p> <p>LATE: Make application after marketable color has developed (OCT – DEC).</p>
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**NOTE:** Do not spray groves that will be harvested early, as fruit coloring will be delayed. Treated fruit will re-green if allowed to remain on the tree for extended periods. Do not use concentrate sprays. Results vary from season to season depending on environmental conditions. For maximum effect on rind firmest and delay in rind aging, make applications before color change.

<p>Lemon/Lime</p>	<p>To decrease rind aging, yellowing, and the amount of small ripe fruit, and to produce a more desirable production pattern relative to market demand.</p>	<p>10 – 32 Grams A.I.  25 – 80 Grams product  0.9 – 2.9 Ounces product</p>	<p>Make a single application when target crop is 1/2 to full size, but still green.</p>
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**NOTE:** When applied two years in a row, an even larger difference in harvest pattern and maturity have been known to occur.

CITRUS – INCREASE JUICE YIELD			
CROP/VARIETY	OBJECTIVE/BENEFIT	USE RATE/ACRE	APPLICATION TIMING
<p>Processing oranges</p>	<p>To increase juice extraction yield in late-harvested processing oranges.</p>	<p>20 Grams A.I.  50 Grams product  1.8 Ounces product</p>	<p>Make a single application at fruit color break in sufficient volume to ensure complete coverage of the fruits.</p>

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### SPRAY GUIDELINES FOR TEMPERATE FRUIT CROPS

For temperate fruit crops, apply in sprays of sufficient water volumes to ensure thorough fruit wetting. Application to plants or trees of low vigor or under stress (pest, nutritional, or water, etc) causes severe leaf and/or fruit drop. Applications of copper fungicides and/or oils within three weeks (before or after) the ProGibb® 40% application often results in significant leaf drop and fruit drop.

### TEMPERATE FRUIT CROPS: FIELD APPLICATIONS

TEMPERATE FRUIT CROPS – FRUITSET			
CROP/VARIETY	OBJECTIVE/BENEFIT	USE RATE/ACRE	APPLICATION TIMING
<p>Highbush Blueberry :</p> <p>Coville, Jersey, Stanley, Earliblue, Weymouth, Walcott, Berkeley, Blueray, Bluecrop, 1316A, Concord, and others</p> <p>(Not for use in California)</p>	To improve fruit set.	<p>40 – 80 Grams A.I.</p> <p>100 – 200 Grams product</p> <p>3.6 – 7.2 Ounces product</p>	<p>Make a single application of 80 Grams A.I. per acre in 40 to 100 gallons of water. The application should be made at full bloom (when 75% of the flowers are fully open).</p> <p>OR</p> <p>Make two applications of 40 Grams A.I. per acre in 40 to 100 gallons of water. Make the first application at full bloom, and the second application within 10-14 days of the first spray.</p> <p>For Weymouth, application can be delayed up to two weeks after bloom to increase size of “shot” berries.</p>
<p>Rabbiteye Blueberry:</p> <p>Aliceblue, Beckyblue, Bonita, Brightwell, Climax, Delite, Tiftblue, Woodward and others.</p> <p>(Not for use in California)</p>	To improve fruit set.	<p>40 – 80 Grams A.I.</p> <p>100 – 200 Grams product</p> <p>3.6 – 7.2 Ounces product</p>	<p>Make a single application of 40 to 80 Grams A.I. in 40 -to-100 gallons of water per acre when most of the flowers are elongated but not yet open (Bloom Stage 5).</p> <p>OR</p> <p>Make two to four applications 10-to-14 days apart starting at bloom</p>

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			Stage 5. Spray 20 to 40 Grams in 40 to 100 gallons of water per acre per application.
Melon (Not for use in California)	To stimulate fruit set during periods of cool temperatures	1 - 4 Grams A.I. 2.5 - 10 Grams product 0.1 - 0.4 Ounces product	Make application just prior to bloom. For cantaloupes and watermelons two additional applications should be made at intervals of 10-to-14 days.
<b>NOTE:</b> For maximum benefits, vines must be in good condition, except for reduced rate of growth due to cool temperatures.			

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**TEMPERATE FRUIT CROPS – SPUR FORMATION**

CROP/VARIETY	OBJECTIVE/BENEFIT	USE RATE/ACRE	APPLICATION TIMING
Sour Cherry  (Not for use in California)	To maintain and extend high fruiting capacity of sour cherry trees by promoting spur formation and reducing the occurrence of "blind" nodes. Spur formation is apparent the year after application. Therefore, changes in shoot, spur, and flower production will not be evident until two or three years after program initiation.	4 – 18 Grams A.I.  10 – 45 Grams product  0.4 – 1.6 Ounces product	Apply one spray 14-to-28 days after bloom. Optimum timing is defined as that stage when 3-to-5 terminal leaves have fully expanded, or, at least 1-to-3 inches of terminal shoot extension has occurred. Use 4 – 18 Grams A.I. per acre, depending on tree age and vigor (See Table below). Apply as a dilute spray in sufficient water to ensure thorough wetting, or as a concentrate spray ensuring uniform coverage.

**NOTE:**

- Applications must be applied annually to ensure spur development and subsequent yield improvement year after year.
- Rates are based on expected normal tree vigor at various ages. Adjust rate according to tree vigor. If trees are vigorous, use lowest recommended rates. Lowest rates should also be used on trees that have been heavily pruned or hedged. Use higher rates for trees low in vigor and weak in shoot and spur production. Excessive application rates will increase vegetative growth at the expense of fruit production the following year.
- Applications will not improve growth of trees under stress conditions, such as nutritional, moisture, or pest. Best results will be obtained when combined with good cultural practices.

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**APPLICATION RATES FOR SOUR CHERRY TREES BY AGE**

TREE AGE (YEARS)	GRAMS A.I./ACRE	GRAMS PRODUCT/ACRE	OUNCES PRODUCT/ACRE
6-10	4 - 6	10 - 15	0.4 - 0.5
11-15	8 - 10	20 - 25	0.7 - 0.9
16-20	10 - 14	25 - 35	0.9 - 1.3
20 + years	14 - 18	35 - 45	1.3 - 1.6

<b>TEMPERATE FRUIT CROPS - FRUIT QUALITY</b>			
<b>CROP/VARIETY</b>	<b>OBJECTIVE/BENEFIT</b>	<b>USE RATE/ACRE</b>	<b>APPLICATION TIMING</b>
Sweet Cherry	To produce larger, brighter colored, firmer fruit	16 - 48 Grams A.I.  40 - 120 Grams product  1.4 - 4.3 Ounces product	Make 1-2 applications depending on crop development.  If crop development is uniform, make one application when the fruit is translucent green to straw colored.  If cultivars or conditions cause non-uniform crop development make two applications. When using 2 applications apply 1/3 to 1/2 of the total desired amount when the majority of the fruit is translucent green. Apply the remaining material 3-7 days later, when the majority of the fruit is straw colored.  Use sufficient water volume to ensure thorough wetting.
<b>NOTE:</b> <ul style="list-style-type: none"> <li>• Color development and harvest date is often slightly delayed.</li> <li>• Use higher rates with heavier crop loads.</li> </ul>			

Stone Fruit Group	To increase fruit firmness and improve fruit quality in the season of application	16 – 32 Grams A.I. 40 – 80 Grams product 1.4 – 2.9 Ounces product	Apply as a single spray one to 4 weeks prior to the beginning of the harvest period. Use sufficient water to achieve complete coverage of fruits and foliage.
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**NOTE:**

- This application has been known to cause reduction in flower counts the year following the application, particularly if it is made during the months of May through July.

Italian Prune (Not for use in California)	To reduce internal browning, improve quality, and increase size.	16 – 48 Grams A.I. 40 – 100 Grams product 1.4 – 4.3 Ounces product	Make a single application four to five weeks before expected harvest. Apply in sufficient water volume to ensure thorough wetting.
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**NOTE:**

- Color development and harvest have occasionally been slightly delayed. Observation of reduced bloom the following season is occasionally seen.

**TEMPERATE FRUIT CROPS**

<b>CROP/VARIETY</b>	<b>OBJECTIVE/BENEFIT</b>	<b>USE RATE/ACRE</b>	<b>APPLICATION TIMING</b>
Pecan (Not for use in AR, CA, & NM)	To extend leaf retention and maintain green foliage.	10 - 40 Grams A.I. 25 – 100 Grams product 0.9-3.6 Ounces product	Make 1-4 applications of 10 g A.I. beginning in July and continuing through October as needed.  Note: Use sufficient water to achieve complete coverage. In most cases 100 gallons per acre has been shown to be effective. <ul style="list-style-type: none"><li>• Do not make more than one application of ProGibb® in July. Using more than one application in July may result in reduced return bloom.</li><li>• ProGibb® 40% may be tank mixed with Belay® Insecticide or with fungicides.</li></ul>

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<b>TEMPERATE FRUIT CROPS – NON BEARING USES</b>			
<b>CROP/VARIETY</b>	<b>OBJECTIVE/BENEFIT</b>	<b>USE RATE/ACRE</b>	<b>APPLICATION TIMING</b>
Non Bearing Stone Fruit  (Not for use in California)	To reduce flowering and fruiting in young stone fruit trees in order to minimize the competitive effect of early fruiting on tree development.	20 – 80 Grams A.I.  50 – 200 Grams product  1.8 – 7.2 Ounces product	Make a single application during the period of flower bud initiation for the following year. Use sufficient water to achieve good coverage of the canopy.
Non Bearing Blueberry  (Not for use in California)	To reduce flowering and fruiting in young blueberry plants in order to minimize the competitive effect of early fruiting on plant development.	20 – 80 Grams A.I.  50 – 200 Grams product  1.8 – 7.2 Ounces product	Make one to four applications during the period of flower bud initiation for the following year. Use sufficient water to achieve good coverage of the canopy.
<b>NOTE:</b> Do not spray plants/trees in their first year. Treat in the second season for reduction of flowering in the third season, and again in the third season if flower reduction and fruiting is desired in the fourth season. Treat only plants/trees that are in good physiological condition. Discontinue treatment the year before desired harvest. Consult with the Valent representative or local horticulturist for timings and rates for specific cultivars in your area.			
Strawberry  (Not for use in California)	To increase runner production of mother plants.	15 – 25 Grams A.I.  37.5 – 62.5 Grams product  1.4 – 2.3 Ounces product	Make a single application to mother plants 10 – 30 days after planting. Plants should have 1-6 leaves at spraying. Apply 100 gallons spray/acre to point of run-off.
<b>NOTE:</b> Not for use on fruiting plants. Treatments have not always been effective on plantings set out after mid-May. Response varies with cultivar and location. Consult your Valent representative or local horticulturist for specific recommendations.			

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**SPRAY GUIDELINES FOR TROPICAL FRUIT CROPS**

<b>CROP/VARIETY</b>	<b>OBJECTIVE/BENEFIT</b>	<b>USE RATE/ACRE</b>	<b>APPLICATION TIMING</b>
Avocado  (Not for use in California)	To improve fruit set and yield	25 Grams A.I.  65 Grams product  2.2 oz product	Apply at the cauliflower stage of inflorescence development.

<b>TROPICAL FRUIT CROPS – FIELD USES</b>			
<b>CROP/VARIETY</b>	<b>OBJECTIVE/BENEFIT</b>	<b>USE RATE/ACRE</b>	<b>APPLICATION TIMING</b>
Pineapple (Not for use in California)	To improve fruit size.	125 – 250 Grams A.I.  312.5 – 625 Grams product  11.3 – 22.5 Ounces product	Apply after flowering. Make 2 applications at 2-5 weeks intervals. Direct sprays to the fruit. Use sufficient water to achieve adequate coverage.
	To improve uniformity of fruit maturity and enhance harvest efficiency.	12 – 24 Grams A.I.  30 – 60 Grams product  1.1 – 2.2 Ounces product	Make the first application a few days after planting when plants are established. Repeat applications at 3-4 weeks intervals.
Coffee (Not for use in California)	To induce flower bud break	10 – 50 Grams A.I.  25 – 125 Grams product  0.9 – 4.5 oz product	Apply in sufficient water volume to assure total coverage of developing buds along all laterals (arrange nozzles for coverage from bottom up as well as top down of laterals and leaves). Multiple applications at 3 to 7 day frequency may be required over a period of 10 to 14 days Use a non-ionic surfactant at 0.05% v/v to enhance performance.

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<b>TROPICAL CROPS – FIELD USES</b>			
<b>CROP/VARIETY</b>	<b>OBJECTIVE/BENEFIT</b>	<b>USE RATE/ACRE</b>	<b>APPLICATION TIMING</b>
Sugarcane  (Not for use in California)	To maintain yields in older plantings, increase bio-mass and stimulate growth before harvest of cane in older production fields (>3 years).	1.0 – 2.0 Grams A.I.  2.5 – 5 Grams product  0.1 – 0.2 oz product	Apply at 1 <sup>st</sup> to 5 <sup>th</sup> internode stage to ratoon crop in at least 20 gal/A. Addition of non-ionic surfactant may increase activity.

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CROP/VARIETY	OBJECTIVE/BENEFIT	USE RATE/ACRE	APPLICATION TIMING
<p>Banana</p> <p>(Not for use in California)</p>	<p><b>ESTABLISHED PLANTINGS:</b> To stimulate plant growth and to reduce the effects of stresses caused by insect, disease or adverse weather. These applications have been known help improve fruit size, quality and overall yields.</p>	<p><b>AERIAL FOLIAR SPRAY:</b> 2.5 – 12 Grams A.I. per acre per spray.  6 – 30 g product  0.25 – 1.1 oz product</p>	<p>Make applications at 1 to 3 weeks frequency throughout the year. Use higher dose rates and shorter spray frequency prior to and during the periods of stress. Use sufficient water volume to achieve adequate canopy coverage. Tank mixing with the standard pesticide treatments applied by air is permissible.</p>
		<p><b>GROUND FOLIAR SPRAY:</b> 2.5 – 12 Grams A.I. per acre per spray.  6 – 30 Grams product  0.25 – 1.1 oz product</p>	<p>Direct applications to developing daughter plants and pre-bloomed mother plants. Make applications every 1 to 3 weeks throughout the year as needed. Use higher dose rates and shorter spray frequency during periods of intense stress. Use sufficient water volume to achieve adequate canopy coverage Tank mixing with standard pesticides is permissible.</p>
	<p><b>NEW PLANTINGS:</b> To stimulate early growth in new plantings, increase plant vigor and accelerate development to flowering.</p>	<p><b>FOLIAR PLANT SPRAYS:</b> Add 1 gram A.I. per gallon of water.</p>	<p>Make 2 to 3 foliar applications, beginning with the 1<sup>st</sup> application timing at 3-5 weeks after planting, followed by a 2<sup>nd</sup> and 3<sup>rd</sup> application at 2 to 3 week frequency. Use sufficient spray water volume to achieve adequate canopy coverage.</p>
	<p><b>BUNCH SPRAYS:</b> To stimulate bunch fruit</p>	<p><b>FOLIAR BUNCH SPRAY:</b></p>	<p>Make applications immediately after floral</p>

	development, improving fruit size and quality and overall yields.	Add 1 - 2 Grams A.I. per gallon of water.	bunch emergence when hands and fingers are exposed through bunch bagging program. Use sufficient water volume to achieve adequate canopy coverage Tank mixing with standard pesticides is permissible. Add non-ionic surfactant at 0.05% v/v to enhance coverage and uptake.
		<b>PSEUDOSTEM INJECTIONS:</b> Add 2.0 to 5.0 Grams A.I. per gallon of water.	Utilize a 5 ml volume per injection. Make 2 to 4 injections from the 14 <sup>th</sup> true leaf to 5 weeks before shooting. Make the first injection beginning at the 14th to 15th true leaves measured from the 10 <sup>th</sup> Filiform leaf development

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CROP/CULTIVAR	OBJECTIVE/BENEFIT	DOSE RATE	APPLICATION TIMING
Plantain  (Not for use in California)	<b>ESTABLISHED PLANTINGS:</b> To stimulate plant growth and to reduce the effects of stresses caused by insect, disease or adverse weather. These applications may help improve fruit size, quality and overall yields.	<b>GROUND FOLIAR SPRAY:</b> Apply 6 – 20 Grams A.I. per acre per spray.	Direct applications to developing daughter plants and pre-bloomed mother plants. Make applications every 1 to 3 weeks throughout the year as needed. Use higher dose rates and shorter spray frequency during periods of intense stress. Use sufficient water volume to achieve adequate canopy coverage. Tank mixing with standard pesticides is permissible.
	<b>NEW PLANTINGS:</b> To stimulate early growth in new plantings, increase plant vigor and accelerate development to flowering.	<b>FOLIAR PLANT SPRAYS:</b> Add 1 gram A.I. per gallon of water.	Make 2 to 3 foliar applications, beginning with the 1 <sup>st</sup> application timing at 3-5 weeks after planting, followed by a 2 <sup>nd</sup> and 3 <sup>rd</sup> application at 2 to 3 week frequency. Use sufficient spray water volume to achieve adequate canopy coverage.

**SPRAY GUIDELINES FOR VEGETABLE CROPS**

For vegetable crops, apply in sprays of sufficient water volumes to ensure thorough fruit wetting. Foliage of treated plants occasionally and temporarily appears lighter green in color due to accelerated growth rates following application. Application to plants of low vigor or under stress (pest, nutritional, or water, etc) causes severe leaf yellowing, poor performance and/ or undesirable effects. Tank-mixing with surfactants, fertilizers, and/or other pesticides should not be done unless compatibility and phytotoxicity testing is done first using appropriate methods.

VEGETABLE CROPS			
CROP/VARIETY	OBJECTIVE/BENEFIT	USE RATE/ACRE	APPLICATION TIMING
Artichoke	To accelerate maturity and shift harvest to an earlier date.	10 – 20 Grams A.I.  25 – 50 Grams product  0.9 – 1.8 Ounces product	For perennials: apply one to three applications at bud initiation stage.  For annuals: apply one to four applications at 2-week intervals, beginning at the fourth true leaf.  Use sufficient water volume to ensure thorough wetting of the entire plant (leaves, stems and buds).
Carrots  Fresh and Processing	To delay leaf senescence.  Maintaining vigorous foliage has been shown to help reduce the incidence of infection by <i>Alternaria dauci</i> .	1 – 6 Grams A.I.  2.5 – 15 Grams product  0.1 – 0.5 Ounces product	Make the first application 4 –6 weeks after emergence using commercial ground or aerial equipment with spray concentrations of 20-30 ppm. In severe disease situations or cool weather a second spray 14 days later is sometimes required to achieve the desired amount of foliar recovery. Do not apply more than twice per crop.
<b>NOTE:</b> Spray applications at concentrations greater than 0.1 oz/10 gallons (30 ppm) can increase the risk of excessive top growth, particularly with a second application.			
Celery	To increase plant height and yield and to overcome stress due to cold weather conditions or saline soils, and obtain earlier maturity.	2.5 – 10 Grams A.I.  6.3 – 25 Grams product  0.2 – 0.9 Ounces product	Make a single application one to four weeks prior to harvest. Use 25-to-50 gallons of water per acre by ground application or 5-to-10 gallons of water per acre for aerial application

			(except in California). Use lower concentrations if applying 3-to-4 weeks before harvest and higher concentrations within 1-to-2 weeks before harvest.
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**NOTE:** Do not apply by air in California. Do not apply earlier than 4 weeks before harvest as bolting has been known to occur.

Cucumber (Not for use in California)	To stimulate fruit set during periods of cool temperatures.	1 – 4 Grams A.I. 2.5 – 10 Grams product 0.1 – 0.4 Ounces product	Make one application prior to bloom followed by two additional applications at intervals of 10-to-14 days. It is acceptable to use up to four applications. Use sufficient water volume for thorough coverage of exposed foliage.
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**NOTE:** For maximum benefits, vines must be in good condition, except for reduced rate of growth due to cool temperatures.

Lettuce for Seed	To obtain uniform bolting and increase seed production.	1 – 4 Grams A.I. 2.5 – 10 Grams product 0.1 – 0.4 Ounces product	Apply one to four applications at two-week intervals, beginning at the fourth true leaf. Use sufficient water volume to ensure thorough wetting.
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Pepper (Not for use in California)	To increase fruit set and promote early season fruit growth.	1 – 3 Grams A.I. 2.5 – 7.5 Grams product 0.1 – 0.27 Ounces product	Apply one to two sprays of 25 to 50 gallons per acre at weekly intervals during the flowering period.
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**NOTE:** This use is best for areas with short growing seasons, or when low temperatures slow plant growth. The high rate is most efficacious for areas and/or varieties with pollination and/or fruit set problems.

Pepper (Not for use in California)	To increase fruit size and yield.	1 – 3 Grams A.I. 2.5 – 7.5 Grams product 0.1 – 0.27 Ounces product	Apply in 25-to-50 gallons of water per acre at the beginning of the picking period.
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**NOTE:** The high rate is best for plants with heavy fruit loads.

<p>Rhubarb</p>	<p>To break dormancy on plants receiving insufficient chilling and to increase market-able yield of forced rhubarb.</p>	<p>10 – 20 Grams A.I. 25 – 50 Grams product 0.9 – 1.8 Ounces product</p>	<p>1) When the rest period is not completely broken, make a single application of 2 fluid Ounces (60 ml) of a solution containing 20 Grams A.I. in 10 gallons of water to each cleaned crown.</p> <p>2) When the rest period is broken by cold weather, apply 2 fluid Ounces (60 ml) of a solution containing 10 Grams A.I. in 10 gallons of water to each cleaned crown.</p>
<p><b>NOTE:</b> Keep forcing house temperatures at 40 – 50F for 24 hours after application. If house is warmer than 50F, cover crowns with plastic. Temperatures above 50F lower yields and cause poor stalk color.</p>			
<p>Spinach, Mustard greens, Collard greens and Turnip greens.  (Not for use in California)</p>	<p>To facilitate harvest, increase yield and improve quality of fall and over-winter crops.</p>	<p>4 – 10 Grams A.I. 10 – 25 Grams product 0.4 – 0.9 Ounces product</p>	<p>Apply a single spray 10-to-18 days before each anticipated harvest on fall or over-winter crops, ideally when daytime temperatures are 40° F-to-70° F and during early morning hours when dew is present on crop.</p> <p>When applied to promote growth of second cutting, wait until some re-growth has started before spraying.</p> <p>Maximum benefit is obtained when below normal temperatures prevail following application and growth would be otherwise slowed in untreated crops.</p>
<p><b>NOTE:</b> Since the promotion of bolting has been known to occur, do not apply after the mid-winter period or if temperatures are expected to exceed 75 F within several days of application. Do not apply on spring plantings.</p>			

**RICE**

CROP/VARIETY	OBJECTIVE/BENEFIT	USE RATE/ACRE	APPLICATION TIMING
<b>Seedling Applications (Early Season)</b>			
Rice	<p>To promote early season plant vigor and more uniform seedling growth prior to permanent flood establishment.</p> <p>To aid in rice water weevil control use ProGibb® 40% in a tank mixture combination with a neonicotinoid insecticide such as Belay® at recommended label rates.</p>	<p>1 – 3 Grams A.I.</p> <p>2.5 – 7.5 Grams product</p> <p>0.1 – 0.3 Ounces product</p>	<p>Make one to two applications at the 1-2 and/or 4-5 leaf stages of growth.</p>
<p><b>Note:</b></p> <ul style="list-style-type: none"> <li>• Early flooding reduces the additional flushing costs associated with a delay in establishing the permanent flood, reduce weed infestations and the number of herbicide applications, and/or promote earlier and more uniform grain maturity.</li> <li>• Do not apply prior to the 2-to-3 leaf stage if gibberellin seed treatment is used.</li> <li>• Timing and dosage are to be based upon environmental conditions, tank mix combinations with herbicides, and preferred permanent flood practice in relation to rice leaf stage.</li> <li>• Do not apply when rice is subjected to drought stress conditions.</li> <li>• The use of a non-ionic surfactant has been seen to improve uptake.</li> </ul>			
<b>Panicle Extension Applications (Late Season)</b>			
Rice	<p>To promote main culm and tiller panicle extension which has been seen to result in improved pollination and seed yield.</p>	<p>3 – 8 Grams A.I.</p> <p>7.5 – 20 Grams product</p> <p>0.3 – 0.7 Ounces product</p>	<p>Make a single application between split-boot and 100% panicle heading.</p> <p>Heading applications to the first crop also has been observed to accelerate re-growth of second crop rice.</p>
Rice (Hybrid Seed Production)	<p>To promote main culm and tiller panicle extension resulting in improved pollination and seed yield.</p>	<p>20 - 100 Grams A.I.</p> <p>50 – 250 Grams product</p> <p>1.8 – 9.0 Ounces product</p>	<p>Make 1-5 applications at regular intervals during the heading period to promote main culm and tiller panicle extension.</p>

<p>Note:</p> <ul style="list-style-type: none"> <li>• Timing and dosage are to be based upon environmental conditions, tank mix combinations with herbicides, and preferred permanent flood practice in relation to rice leaf stage.</li> <li>• Do not apply when rice is subjected to drought stress conditions.</li> <li>• Foliage occasionally and temporarily appears lighter green in color due to accelerated growth rates following ProGibb® 40% application.</li> </ul>			
Rice	Promote yield enhancement of ratoon crop rice by increasing ratoon tiller growth and aiding ratoon stand establishment.	<p>4 – 7 Grams A.I.</p> <p>10 – 17.5 Grams product</p> <p>0.4 – 0.6 Ounces product</p>	Apply single application at post flowering through soft dough stage.

**3) SEED TREATMENT APPLICATION**

**Mixing Instructions**

Apply ProGibb® 40% to seed with standard mist treating equipment. For best results, ensure complete and uniform coverage.

Fill the treatment tank with half of the final tank mix volume. Add the required amount of ProGibb® 40% and mix thoroughly while adding water and other co-applied seed treatment products (see Compatibility with Other Chemicals section) to the desired final volume.

An approved dye must be added to distinguish ProGibb® 40% treated seed and prevent inadvertent use for food, feed, or oil purposes. Treated seed must be labeled in accordance with the requirements of the Federal Seed Act.

**Use Restriction**

**Do not use treated seed for food, feed or oil purposes.**

ProGibb® 40% stimulates seed germination and promotes faster and more uniform stand establishment.			
CROP/VARIETY	OBJECTIVE/BENEFIT	USE RATE/ACRE	APPLICATION TIMING
Seed treatment for rice	<p>To promote germination and emergence for semi-dwarf and tall varieties.</p> <p>To help increase final stand density and uniformity when seed are planted deeper to receive adequate moisture.</p>	<p>0.5 to 2 g A.I.</p> <p>(0.05 – 0.2 oz product) per 100 lbs seed.</p>	For use with drill or broadcast seeding systems.
<ul style="list-style-type: none"> <li>• Do not apply ProGibb® 40% prior to a 24 hour presoak or to water used for the presoak.</li> <li>• Do not exceed 0.2 oz of product/100 lbs of seed.</li> </ul>			

CROP/VARIETY	OBJECTIVE/BENEFIT	USE RATE/ACRE	APPLICATION TIMING
Cotton	Promote early season growth and increase seedling vigor	1 to 6 Grams A.I.  2.5 to 15 Grams product  0.1 to 0.5 Ounces products	Apply 1 – 2 applications as a foliar broadcast spray during the 3 to 7 leaf/node stage. If applying as a banded spray, reduce rates accordingly. Complete coverage of leaf tissue is essential.  Use higher rates when temperatures will likely average 75°F or less during the 14 days following application(s).

**Notes:**

- Do not apply ProGibb® to plants that are under drought stress. If the plants are under continuous stress, delay the application of ProGibb® until the stress is alleviated and the plants are beginning to recover.
- Applying more often than necessary to achieve the desired height, results in excessive vegetative growth.

TEMPERATE FIELD CROPS – FIELD USES			
CROP/VARIETY	OBJECTIVE/BENEFIT	USE RATE/ACRE	APPLICATION TIMING
Dry Bean	Promotes early season growth, increased seedling vigor, and increased plant height allowing for improved harvesting efficiency.	1 – 6 Grams A.I.  2.5 – 15 Grams product  0.1 – 0.5 Ounces products	Apply 1 – 2 applications as a foliar broadcast spray during the 3 to 7 leaf/node stage. If applying as a banded spray, reduce rates accordingly. Complete coverage of leaf tissue is essential.  Use higher rates when temperatures will likely average 75°F or less during the 14 days following application(s).

**NOTE:**

- Do not apply plants that are under drought stress. If plants are under continuous stress, delay the application until the stress is alleviated and the plants are beginning to recover.
- Applying more often than necessary to achieve the desired height results in excessive vegetative growth.
- Highly variable responses based on genetic background or variety are known to occur. Caution should be used when applying to varieties where there is no prior knowledge of the response.

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Hops  Seeded and seedless Fuggle hops and similar varieties adapted to the North-western states.	To increase fruit set and yield.	4 – 6 Grams A.I.  10 – 15 Grams product  0.4 – 0.5 Ounces product	Make a single application in 100-150 gallons of water per acre when vine growth is 5-8 feet in length.
Note: Do not apply ProGibb® 40% to plants that are under drought stress. Applications during stem elongation may increase lodging. Avoid drift or accidental application to other crops.			

TEMPERATE FIELD CROPS – FIELD USES			
CROP/VARIETY	OBJECTIVE/BENEFIT	USE RATE/ACRE	APPLICATION TIMING
Soybean	To improve mechanical harvest efficiency by elongating the first and second internode of young plants.	1 – 20 Grams A.I.  2 – 50 Grams product  0.1 – 1.8 Ounces product	V1-V4: Apply 1-2 applications as a foliar broadcast spray during growth stages V1-V4 (1-2 sets of unfolded trifoliolate leaves). If applying as a banded spray, reduce rates accordingly. Complete coverage of leaf tissue is essential. Make applications in 20-40 gallons water/A.I.
Note: Differences in response by variety may be large. Caution should be used when using on untested varieties.			
	To enhance post-emergence grass control.	1 – 20 Grams A.I. 2 – 50 Grams product  0.1 – 1.8 Ounces product.	V2-R5: Apply with SelectMax® herbicide for enhanced control of Johnsongrass and volunteer corn in soybeans.
	To increase pod set and increase the growth of the plant.	2 – 4 Grams A.I. 6 – 11 Grams product  0.2 – 0.4 Ounces product	Make a single application at V5-R3 growth stage.
Note: Differences in response by variety may be large. Caution should be used when using on untested varieties. Consult your Valent USA Representative.			
Peanuts	To promote plant growth.	2.5 – 5.0 Grams A.I 6 – 12 Grams product  0.2 – 0.4 Ounces	Make two to four applications on a two week interval. Begin sprays two weeks after emergence.

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		product	
	To enhance post-emergence grass control.	5 – 20 Grams A. 12 – 50 Grams product  0.4 – 1.8 Ounces product.	Apply with SelectMax <sup>®</sup> herbicide for enhanced control of Johnsongrass and volunteer corn in peanuts.
Note: Differences in response by variety may be large. Caution should be used when using on untested varieties. For specific variety information, consult your Valent Representative.			

SelectMax<sup>®</sup> registered trademark of Valent USA Corporation.

**GENERAL PRE-PLANT USE: For Use in pre-plant burndown herbicide applications.**

USE	OBJECTIVE/BENEFIT	RATE/ACRE	APPLICATION TIMING
Soil application			
	To promote early Palmer amaranth and/or waterhemp seed germination to better synchronize their sensitivity.	5 – 20 Grams A.I 12 – 50 Grams product  0.4 – 1.8 Ounces product.	Apply with a pre-emergence herbicide that has activity on Palmer amaranth and/or waterhemp (e.g. Valor <sup>®</sup> , Valor <sup>®</sup> XLT, Gangster <sup>®</sup> , and Fierce <sup>®</sup> ).

Valor<sup>®</sup>, Valor<sup>®</sup> XLT, Gangster<sup>®</sup>, and Fierce<sup>®</sup> are registered trademarks of Valent USA Corporation.

**SPRAY GUIDELINES FOR WATERCRESS:**

Watercress			
CROP/VARIETY	OBJECTIVE/BENEFIT	USE RATE/ACRE	APPLICATION TIMING
Watercress	1) To enhance growth in adverse weather conditions;  2) To help plants resume growth after insect and disease attacks;  3) To increase root free stem length during low light/short day conditions.	15 - 25 Grams A.I.  37.5 – 62.5 Grams product  1.4 – 2.3 Ounces product	Make one or two applications per acre per crop 3 to 7 days before harvest. Use 50-100 gallons of water per acre.

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**PROGIBB® 40% CONVERSIONS**

ProGibb® 40% contains 1.0 gram of A.I. per 2.5 Grams (0.09 oz) of product.

To convert from Grams A.I. to Grams Product – Multiply Grams A.I. x 2.5  
(i.e. 32 g A.I. x 2.5 = 80 g ProGibb® 40%)

To convert from Grams A.I. to Dry Ounces Product – Multiply Grams A.I. x 0.09  
(i.e. 32 g A.I. x 0.09 = 2.9 oz ProGibb 40%)

**CONVERSION TABLE (for the 320 g size)**

Grams of Active Ingredient	Grams of ProGibb® 40%	Ounces of ProGibb® 40%
2	5	0.2
4	10	0.4
5	12.5	0.5
6	15	0.6
8	20	0.7
10	25	0.9
15	37.5	1.4
20	50	1.8
30	75	2.7
40	100	3.6
50	125	4.5
60	150	5.4
80	200	7.2
100	250	9.0
128	320	11.5

**Grams of ProGibb® 40% WSG for given ppm's of Gibberellic Acid at Different Water Volumes.**

Gallons of Water	Desired parts per million (ppm) gibberellic acid									
	4	5	6	8	10	15	20	30	40	50
75	1.5	3	4.5	6	7.5	11	14	21	28	35
100	2	4	6	8	10	14	19	28	38	47
125	2.5	5	7.5	9	12	18	24	35	47	59
150	3	6	9	11	14	21	28	43	57	71
200	4	8	11	15	19	28	38	57	76	95
250	5	10	14	19	24	35	47	71	95	118
300	5.5	11	17	23	28	43	57	85	113	142
400	7.5	15	23	30	38	57	76	113	151	189
500	9.5	19	28	38	47	71	95	142	189	236
600	11	23	34	45	57	85	113	170	227	284
750	14	28	43	57	71	106	142	213	284	

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Note: The numbers inside the table are the Grams of ProGibb® 40% WSG needed to obtain the desired ppm's for each gallonage.

**Example:**

To make 250 gallons of a 40 ppm gibberellic acid solution, dissolve 95 Grams of ProGibb® 40% WSG in 250 gallons of water (see shaded area).

**CONVERSION TABLE (for the 80 g size)**

ProGibb 40% contains approximately 10 Grams of active ingredient per 25 Grams of product.

Grams of Active Ingredient	Grams of ProGibb® 40%	Ounces of ProGibb® 40%
2	5	0.2
4	10	0.4
5	12.5	0.5
6	15	0.6
8	20	0.7
10	25	0.9
15	37.5	1.4
20	50	1.8
30	75	2.7
40	100	3.6
50	125	4.5
60	150	5.4
80	200	7.2

(Alternate for 80 g packaging)

Gallons of Water	parts per million (ppm) gibberellic acid									
	4	5	6	8	10	15	20	30	40	50
75	3.0	3.8	4.5	6.0	7.5	11.3	15.0	22.5	30.0	38
100	4.0	5.0	6.0	8.0	10.0	15.0	20.0	30.0	40.0	50
125	5.0	6.3	7.5	10.0	12.5	18.8	25.0	37.5	50.0	63
150	6.0	7.5	9.0	12.0	15.0	22.5	30.0	45.0	60.0	75
200	8.0	10.0	12.0	16.0	20.0	30.0	40.0	60.0	80.0	

Note: The numbers inside the table are the Grams of ProGibb® 40% WSG needed to obtain the desired ppm's for each gallonage.

**Example:**

To make 200 gallons of a 40 ppm gibberellic acid solution, dissolve 80 Grams of ProGibb® 40% WSG in 200 gallons of water (see shaded area).

**Warranty and Disclaimer Statement:**

To the fullest extent permitted by law, seller makes no warranty, express or implied, of merchantability, fitness or otherwise concerning use of this product other than as indicated on the label. User assumes all risks of use, storage or handling not in strict accordance with accompanying directions.

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SUB-LABEL II

**RyzUp SmartGrass®**  
PLANT GROWTH REGULATOR  
Water Soluble Granule

For agricultural use on Pastures and forage crops.

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**RyzUp SmartGrass®  
Plant Growth Regulator  
Water Soluble Granule**

For Organic Production

Active Ingredient	
Gibberellin A <sub>3</sub> .....	40.0% w/w
Other Ingredients.....	60.0% w/w
Total.....	100.0% w/w

Contains a total of 128 grams of Gibberellic Acid in 320 grams of product.

**KEEP OUT OF REACH OF CHILDREN**

**CAUTION**

See inside booklet for Precautionary Statements.

EPA Registration No. 73049-1  
EPA Establishment No.

Valent BioSciences Corporation  
870 Technology Way, Suite 100  
Libertyville, IL 60048  
1-847-968-4700

Net Contents: 80 grams, 320 grams and 850 grams bottles  
This container will treat \_\_\_\_\_ acre at the maximum use rate, as directed for use on \_\_\_\_\_.

<b>FIRST AID</b>	
If in eyes	<ul style="list-style-type: none"> <li>• Hold eye open and rinse slowly and gently with water for 15-20 minutes.</li> <li>• Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.</li> <li>• Call a poison control center or doctor for treatment advice.</li> </ul>
If on skin or clothing	<ul style="list-style-type: none"> <li>• Take off contaminated clothing.</li> <li>• Rinse skin immediately with plenty of water for 15-20 minutes.</li> <li>• Call a poison control center or doctor for treatment advice.</li> </ul>
<b>HOT LINE NUMBER</b>	
Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also call toll-free 1-800-892-0099 (24 hours) for emergency medical treatment and/or transport emergency information. For all other information, call 1-800-6-Valent.	

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## PRECAUTIONARY STATEMENTS

### HAZARDS TO HUMANS & DOMESTIC ANIMALS

Caution: Causes moderate eye irritation. Harmful if absorbed through skin. Avoid contact with skin, eyes or clothing. Wash thoroughly with soap and water after handling. Remove and wash contaminated clothing before reuse.

#### Personal Protective Equipment (PPE)

Applicators and other handlers must wear:

- Long-sleeved shirt and long pants.
- Waterproof gloves.
- Shoes plus socks.

Follow the manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

#### User Safety Recommendations

Users should:

- Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet
- Remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

#### ENVIRONMENTAL HAZARDS

For terrestrial uses: Do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate water when cleaning or disposing of equipment washwaters or rinsate.

#### DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling. Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the State or Tribe agency responsible for pesticide regulation.

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## AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR Part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE), and restricted-entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 4 hours *unless wearing appropriate PPE*.

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water is:

- Coveralls.
- Waterproof gloves.
- Shoes plus socks.

## GENERAL DIRECTIONS FOR USE

Use only as directed. Read the label thoroughly and make sure it is understood before making applications. Keep out of reach of children.

### Application Instructions:

- RyzUp SmartGrass<sup>®</sup> water soluble granule contains gibberellic acid which is an extremely potent plant growth regulator; when applying plant growth regulators, deviations from the label directions in the rates, timings, water volumes, or the adoption of untested spray mixes, results in undesirable effects. Always consult the local Valent representative or crop specialist in your area for the spray regimen best suited to your conditions.
- Do not apply to plants under pest, nutritional, or water stress.
- When a range of rates is indicated, use the concentration and spray volume indicated locally by the local Valent representative or crop specialist.
- For optimum effectiveness, thorough spray coverage of the target area must be achieved. Prepare solution concentrations by mixing the required amount of product with water in a clean, empty spray tank. Use of a non-ionic surfactant has been shown to increase wetting and uptake of the active ingredient. Discard any unused spray material at the end of each day following local, state or federal law.
- For most efficacious results, use water with a pH of 4.0 to 8.5. Use buffer for water with pH above or below this range.
- Applications made under slow drying conditions (cool to warm temperatures, medium to high relative humidity, and no wind) will increase absorption of the active ingredient by the plant, thus optimizing

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effectiveness. Night-time applications are encouraged when day-time conditions are not conducive to slow drying conditions.

- Rainfastness: Re-apply if significant rain occurs within 2 hours of application.
- Avoid drift or accidental application to other crops.
- **Compatibility:** When considering tank mixing with other products, use the following compatibility jar test before mixing a whole tank.

Start with a clear glass or plastic quart jar. Add water from the same water source that will be used for the larger tank mix. Add the pesticides in correct proportions. Mix thoroughly and let stand for a minimum 15 minutes. Heat, separation, gelling, are all signs of incompatibility. Before using any mixes that pass the jar tests for compatibility, it is imperative to test the mixture on a designated area as it may result either in phytotoxicity or ineffectiveness. For further information, consult your local Valent representative.

- For aerial applications spray volumes must be greater than 2 gallons per acre (10 gallons per acre for tree crops).
- No pre-harvest interval is required for this product.
- Entry into treated areas is allowed after the restricted entry interval (REI) of 4 hours before this time entry is prohibited unless wearing appropriate PPE (coveralls, waterproof gloves, shoes plus socks).

#### **STORAGE AND DISPOSAL**

Do not contaminate water, food or feed by storage or disposal.

##### **Pesticide Storage**

Keep containers tightly closed when not in use.

##### **Pesticide Disposal**

Wastes resulting from the use of this product must be disposed of on site or at an approved waste disposal facility.

##### **Container Disposal**

Non-refillable container. Do not reuse or refill this container. Triple rinse (or equivalent) promptly after emptying. Triple rinse as follows: Empty remaining contents into application equipment or mix tank. Fill container ¼ full with water and recap. Shake 10 seconds. Pour rinsate into application equipment or mix tank or store rinsate for later use or disposal. Drain for 10 seconds after flow begins to drip. Repeat this procedure two more times. Then offer for recycling or dispose of in a sanitary landfill, or incineration, if allowed by state and local authorities by burning. If burned, stay out of smoke.

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## SPRAY GUIDELINES

Apply in sprays of sufficient water volumes to ensure thorough wetting. Tank-mixing with surfactants, fertilizers, and/or other pesticides should not be done unless compatibility and phytotoxicity testing is done first using appropriate methods.

## DIRECTIONS FOR CHEMIGATION

Fill the supply tank with the desired amount of water and begin agitation. Agitation should be maintained throughout the mixing and application process. Add the required amount of RyzUp SmartGrass® to supply tank in order to achieve the final solution rate recommended for the specific crop to be treated. RyzUp SmartGrass® should be applied at the end of water application (prior to last complete cycle in moving systems).

## CHEMIGATION PRECAUTIONS:

Apply this product only through the following systems: center pivot, lateral move, side/wheel roll, traveler, solid set, big gun or hand move which have overhead sprinklers. Do not apply this product through any other type of irrigation system. Crop injury or lack of effectiveness can result from non-uniform distribution of treated water. If you have any questions about calibration, you should contact State Extension Service specialists, equipment manufacturers or other experts. Do not connect an irrigation system (including greenhouse systems) used for pesticide application to a public water system unless the pesticide label prescribed safety devices for public water systems are in place. A person knowledgeable of the chemigation system and responsible for its operation or under the supervision of the responsible person, shall shut the system down and make necessary adjustments should the need arise. Prior to application ensure that the chemigation system meets the following requirements:

- The system must contain a functional check valve, vacuum relief valve, and low-pressure drain appropriately located on the irrigation pipeline to prevent water source contamination from backflow.
- The pesticide injection pipeline must contain a functional, automatic, quick closing check valve to prevent the flow of fluid back toward the injection pump.
- The pesticide injection pipeline must also contain a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.
- The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops.
- The irrigation line or water pump must include a functional pressure switch, which will stop the water pump motor when the water pressure decreases to the point where pesticide distribution is adversely affected.
- Systems must use a metering pump, such as a positive displacement injection pump (e.g. diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.

In addition to the above use rates and recommendations, the following precautions must be observed when using this product in any type of irrigation system.

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## **CHEMIGATION SYSTEMS CONNECTED TO PUBLIC WATER SYSTEMS**

Public water system means a system for the provision to the public of piped water for human consumption if such system has at least 15 service connections or regularly serves an average of at least 25 individuals daily at least 60 days of the year. Chemigation systems connected to public water systems must contain a functional, reduced pressure zone, backflow preventer (RPZ) or the functional equivalent in the water supply line upstream from the point of pesticide introduction. As an option to the RPZ, the water from the public water systems should be discharged into a reservoir tank prior to pesticide introduction. There shall be a complete physical break (air gap) between the outlet end of the fill pipe and the top or overflow rim of the reservoir tank of at least twice the inside diameter of the fill pipe. The pesticide injection pipeline must contain a functional, automatic, quick closing check valve to prevent the flow of fluid back toward the injection pump. The pesticide injection pipeline must also contain a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down. The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops, or in cases where there is no water pump, when the water pressure decreases to the point where the pesticide distribution is adversely affected.

Systems must use a metering pump, such as a positive displacement injection pump (e.g. diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.

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<b>PASTURES &amp; FORAGE – FIELD USES</b>			
<b>CROP/VARIETY</b>	<b>OBJECTIVE/BENEFIT</b>	<b>USE RATE/ACRE</b>	<b>APPLICATION TIMING</b>
Perennial Forage Grasses	To stimulate dry matter production for grazing, hay, green chop or silage when cool season conditions limit growth rates.	3 - 11 Grams A.I.  7.5 – 27.5 Grams product  0.3 – 1.0 Ounces product	Spring Application: 1 to 3 applications every 3 to 4 weeks starting at green up after 1 to 2 inches of new shoot growth has emerged.  Autumn Application: 1 to 3 applications every 3 to 4 weeks starting when forage growth has slowed due to cool temperatures.  Best response occurs when average daily temperatures are between 40° F to 60° F and adequate moisture and nutrition are present.
Annual Forage Grasses	To stimulate dry matter production for grazing, hay, green chop or silage when cool season conditions limit growth rates.	3 - 11 Grams A.I.  7.5 – 27.5 Grams product  0.3 – 1.0 Ounces product	Apply 1 to 6 applications every 3 to 4 weeks from autumn to early spring during periods of suboptimal growth due to cool temperatures.  If applying to over-seeded pasture or newly established pasture, apply only after seedlings are well established.  Best response occurs when average daily temperatures are between 40° F to 60° F and adequate moisture and nutrition are present.
Cereal Grains (such as barley, oats, rye, sorghum, wheat, triticale)	To stimulate dry matter production for grazing, hay, green chop or silage when cool season conditions limit growth rates.	3 - 11 Grams A.I.  7.5 – 27.5 Grams product  0.3 – 1.0 Ounces product	Spring Application: 1 to 3 applications every 3 to 4 weeks starting at green up after 1 to 2 inches of new shoot growth has emerged.  Autumn Application: 1 to 3 applications every 3 to 4 weeks starting when forage growth has slowed due to cool temperatures.  Application to cereal grains during stem elongation

			<p>(jointing onwards) can result in lodging. Apply during early tillering growth stages prior to stem elongation to avoid lodging.</p> <p>Best response occurs when average daily temperatures are between 40° F to 60° F and adequate moisture and nutrition are present.</p>
<p>Winter Brassicas (such as turnip, kale, rape)</p>	<p>To stimulate dry matter production for grazing, hay, green chop or silage when cool season conditions limit growth rates.</p>	<p>3 - 11 Grams A.I. 7.5 – 27.5 Grams product 0.3 – 1.0 Ounces product</p>	<p>Spring Application: 1 to 3 applications every 3 to 4 weeks starting at green up after 1 to 2 inches of new shoot growth has emerged.</p> <p>Autumn Application: 1 to 3 applications every 3 to 4 weeks starting when forage growth has slowed due to cool temperatures.</p> <p>Best response occurs when average daily temperatures are between 40° F to 60° F and adequate moisture and nutrition are present.</p>

**NOTE:**

- Foliage occasionally and temporarily appears lighter green in color due to accelerated growth rates following application. For best results, ensure fertility is adequate to sustain additional pasture growth.
- Plants will not respond to treatment without adequate moisture or if under pest and/or nutritional stress.
- Once plants are at their maximum growth rate under optimal temperatures application of RyzUp SmartGrass will not stimulate additional growth.
- Plants will not respond when the ground is frozen.
- Plants treated at maximum physiological size will not respond with additional growth.

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<b>FIELD USES</b>			
<b>CROP/VARIETY</b>	<b>OBJECTIVE/BENEFIT</b>	<b>USE RATE/ACRE</b>	<b>APPLICATION TIMING</b>
Corn: Silage, Field, Popcorn, Sweet corn	To increase yield and help overcome the effects of heat or drought.	2 – 6 Grams A.I. 5 – 15 Grams product  0.3 – 0.6 Ounces product	Apply at V3-V6 Apply up to two applications
Note: Better results have been seen with the use of a non-ionic surfactant at 0.05% v/v.			
Corn: Silage, Field, Popcorn, Sweet corn	To increase yield and help overcome the effects of heat or drought.	2 – 6 Grams A.I.  .5 – 15 Grams product  0.3 – 0.6 Ounces product	Apply at VT in a mixture with a corn fungicide.
Note: RyzUp SmartGrass may be mixed with Domark® 230 ME Fungicide and other corn fungicides. Better results have been seen with the use of a non-ionic surfactant at 0.05% v/v. However several corn fungicide labels (including Domark® 230 ME Fungicide) do not allow adjuvants in sprays made between V-8 (8 leaf collar) and VT (lowest branch of the tassel visible but silks have not emerged). Read and follow all use directions and restrictions of tank-mixed fungicides.			

Domark® is a registered trademark of Isagro S.p.A

**CONVERSION TABLE** (for the 320 g size)

Ryzup SmartGrass® contains approximately 10 grams of active ingredient per 25grams of product.

<b>Grams of Active Ingredient</b>	<b>Grams of ProGibb® 40%</b>	<b>Ounces of ProGibb® 40%</b>
2	5	0.2
4	10	0.4
5	12.5	0.5
6	15	0.6
8	20	0.7
10	25	0.9
15	37.5	1.4
20	50	1.8
30	75	2.7
40	100	3.6
50	125	4.5
60	150	5.4
80	200	7.2

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100	250	9.0
128	320	11.5

**Grams of Ryzup SmartGrass® for given ppm's of Gibberellic Acid at Different Water Volumes.**

Gallons of Water	Desired parts per million (ppm) gibberellic acid									
	4	5	6	8	10	15	20	30	40	50
75	1.5	3	4.5	6	7.5	11	14	21	28	35
100	2	4	6	8	10	14	19	28	38	47
125	2.5	5	7.5	9	12	18	24	35	47	59
150	3	6	9	11	14	21	28	43	57	71
200	4	8	11	15	19	28	38	57	76	95
250	5	10	14	19	24	35	47	71	95	118
300	5.5	11	17	23	28	43	57	85	113	142
400	7.5	15	23	30	38	57	76	113	151	189
500	9.5	19	28	38	47	71	95	142	189	236
600	11	23	34	45	57	85	113	170	227	284
750	14	28	43	57	71	106	142	213	284	

Note: The numbers inside the table are the grams of RyzUp SmartGrass® needed to obtain the desired ppm's for each gallonage.

Example:

To make 250 gallons of a 40 ppm gibberellic acid solution, dissolve 95 grams of RyzUp SmartGrass® in 250 gallons of water (see shaded area).

**CONVERSION TABLE (for the 80 g size)**

Ryzup SmartGrass® contains approximately 10 grams of active ingredient per 25 grams of product.

Grams of Active Ingredient	Grams of ProGibb® 40%	Ounces of ProGibb® 40%
2	5	0.2
4	10	0.4
5	12.5	0.5
6	15	0.6
8	20	0.7
10	25	0.9
15	37.5	1.4
20	50	1.8
30	75	2.7
40	100	3.6
50	125	4.5
60	150	5.4
80	200	7.2

(Alternate for 80 grams packaging)

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Gallons of Water	parts per million (ppm) gibberellic acid									
	4	5	6	8	10	15	20	30	40	50
75	3.0	3.8	4.5	6.0	7.5	11.3	15.0	22.5	30.0	38
100	4.0	5.0	6.0	8.0	10.0	15.0	20.0	30.0	40.0	50
125	5.0	6.3	7.5	10.0	12.5	18.8	25.0	37.5	50.0	63
150	6.0	7.5	9.0	12.0	15.0	22.5	30.0	45.0	60.0	75
200	8.0	10.0	12.0	16.0	20.0	30.0	40.0	60.0	80.0	

Note: The numbers inside the table are the Grams of RyzUp SmartGrass® needed to obtain the desired ppm's for each gallonage.

Example:

To make 200 gallons of a 40 ppm gibberellic acid solution, dissolve 80 Grams of RyzUp SmartGrass® in 200 gallons of water (see shaded area).

**WARRANTY AND DISCLAIMER STATEMENT**

To the fullest extent permitted by law, seller makes no warranty, express or implied, of merchantability, fitness or otherwise concerning use of this product other than as indicated on the label. User assumes all risks of use, storage or handling not in strict accordance with accompanying directions.

Ryzup SmartGrass® is a registered trademark of Valent BioSciences Corporation.

Products That Work, From People Who Care is a trademark of Valent U.S.A. Corporation.

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Registered by:

Valent BioSciences Corporation

870 Technology Way, Suite 100

Libertyville, IL 60048

04-XXXX/RX

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**SUB-LABEL III**

**RyzUp SmartCorn™**  
**PLANT GROWTH REGULATOR**  
**Water Soluble Granule**

For agricultural use on Corn.

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**RyzUp SmartCorn™**

**Plant Growth Regulator  
Water Soluble Granule**

For Organic Production

Active Ingredient	
Gibberellin A <sub>3</sub> .....	40.0% w/w
Other Ingredients.....	60.0% w/w
Total.....	100.0% w/w

Contains a total of 128 grams of Gibberellic Acid in 320 grams of product.

**KEEP OUT OF REACH OF CHILDREN**

**CAUTION**

See inside booklet for Precautionary Statements.

EPA Registration No. 73049-1  
EPA Establishment No.

Valent BioSciences Corporation  
870 Technology Way, Suite 100  
Libertyville, IL 60048  
1-847-968-4700

Net Contents: 320 grams and 850 grams  
This container will treat \_\_\_\_\_ acre at the maximum use rate, as directed for use on \_\_\_\_\_.

<b>FIRST AID</b>	
If in eyes	<ul style="list-style-type: none"> <li>• Hold eye open and rinse slowly and gently with water for 15-20 minutes.</li> <li>• Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.</li> <li>• Call a poison control center or doctor for treatment advice.</li> </ul>
If on skin or clothing	<ul style="list-style-type: none"> <li>• Take off contaminated clothing.</li> <li>• Rinse skin immediately with plenty of water for 15-20 minutes.</li> <li>• Call a poison control center or doctor for treatment advice.</li> </ul>
<b>HOT LINE NUMBER</b>	
Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also call toll-free 1-800-892-0099 (24 hours) for emergency medical treatment and/or transport emergency information. For all other information, call 1-800-6-Valent.	

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## PRECAUTIONARY STATEMENTS

### HAZARDS TO HUMANS & DOMESTIC ANIMALS

Caution: Causes moderate eye irritation. Harmful if absorbed through skin. Avoid contact with skin, eyes or clothing. Wash thoroughly with soap and water after handling. Remove and wash contaminated clothing before reuse.

#### Personal Protective Equipment (PPE)

Applicators and other handlers must wear:

- Long-sleeved shirt and long pants.
- Waterproof gloves.
- Shoes plus socks.

Follow the manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

#### User Safety Recommendations

Users should:

- Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet
- Remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

#### ENVIRONMENTAL HAZARDS

For terrestrial uses: Do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate water when cleaning or disposing of equipment washwaters or rinsate.

#### DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling. Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the State or Tribe agency responsible for pesticide regulation.

### AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR Part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE), and restricted-entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 4 hours *unless wearing appropriate PPE*.

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water is:

- Coveralls.
- Waterproof gloves.
- Shoes plus socks.

### GENERAL DIRECTIONS FOR USE

Use only as directed. Read the label thoroughly and make sure it is understood before making applications. Keep out of reach of children.

#### Application Instructions:

- RyzUp SmartCorn™ water soluble granule contains gibberellic acid which is an extremely potent plant growth regulator; when applying plant growth regulators, deviations from the label directions in the rates, timings, water volumes, or the adoption of untested spray mixes, results in undesirable effects. Always consult the local Valent representative or crop specialist in your area for the spray regimen best suited to your conditions.
- Do not apply to plants under pest, nutritional, or water stress.
- When a range of rates is indicated, use the concentration and spray volume indicated locally by the local Valent representative or crop specialist.
- For optimum effectiveness, thorough spray coverage of the target area must be achieved. Prepare solution concentrations by mixing the required amount of product with water in a clean, empty spray tank. Use of a non-ionic surfactant has been shown to increase wetting and uptake of the active ingredient. Discard any unused spray material at the end of each day following local, state or federal law.
- For most efficacious results, use water with a pH of 4.0 to 8.5. Use buffer for water with pH above or below this range.

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- Applications made under slow drying conditions (cool to warm temperatures, medium to high relative humidity, and no wind) will increase absorption of the active ingredient by the plant, thus optimizing effectiveness. Night-time applications are encouraged when day-time conditions are not conducive to slow drying conditions.
- Rainfastness: Re-apply if significant rain occurs within 2 hours of application.
- Avoid drift or accidental application to other crops.
- **Compatibility:** When considering tank mixing with other products, use the following compatibility jar test before mixing a whole tank.

Start with a clear glass or plastic quart jar. Add water from the same water source that will be used for the larger tank mix. Add the pesticides in correct proportions. Mix thoroughly and let stand for a minimum 15 minutes. Heat, separation, gelling, are all signs of incompatibility. Before using any mixes that pass the jar tests for compatibility, it is imperative to test the mixture on a designated area as it may result either in phytotoxicity or ineffectiveness. For further information, consult your local Valent representative.

- For aerial applications spray volumes must be greater than 2 gallons per acre (10 gallons per acre for tree crops).
- No preharvest interval is required for this product.
- Entry into treated areas is allowed after the restricted entry interval (REI) of 4 hours before this time entry is prohibited unless wearing appropriate PPE (coveralls, waterproof gloves, shoes plus socks).

#### **STORAGE AND DISPOSAL**

Do not contaminate water, food or feed by storage or disposal.

##### **Pesticide Storage**

Keep containers tightly closed when not in use.

##### **Pesticide Disposal**

Wastes resulting from the use of this product must be disposed of on site or at an approved waste disposal facility.

##### **Container Disposal**

Non-refillable container. Do not reuse or refill this container. Triple rinse (or equivalent) promptly after emptying. Triple rinse as follows: Empty remaining contents into application equipment or mix tank. Fill container ¼ full with water and recap. Shake 10 seconds. Pour rinsate into application equipment or mix tank or store rinsate for later use or disposal. Drain for 10 seconds after flow begins to drip. Repeat this procedure two more times. Then offer for recycling or dispose of in a sanitary landfill, or incineration, if allowed by state and local authorities by burning. If burned, stay out of smoke.

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## SPRAY GUIDELINES

Apply in sprays of sufficient water volumes to ensure thorough wetting. Tank-mixing with surfactants, fertilizers, and/or other pesticides should not be done unless compatibility and phytotoxicity testing is done first using appropriate methods.

## DIRECTIONS FOR CHEMIGATION

Fill the supply tank with the desired amount of water and begin agitation. Agitation should be maintained throughout the mixing and application process. Add the required amount of RyzUp SmartGrass® to supply tank in order to achieve the final solution rate recommended for the specific crop to be treated. RyzUp SmartGrass® should be applied at the end of water application (prior to last complete cycle in moving systems).

## CHEMIGATION PRECAUTIONS:

Apply this product only through the following systems: center pivot, lateral move, side/wheel roll, traveler, solid set, big gun or hand move which have overhead sprinklers. Do not apply this product through any other type of irrigation system. Crop injury or lack of effectiveness can result from non-uniform distribution of treated water. If you have any questions about calibration, you should contact State Extension Service specialists, equipment manufacturers or other experts. Do not connect an irrigation system (including greenhouse systems) used for pesticide application to a public water system unless the pesticide label prescribed safety devices for public water systems are in place. A person knowledgeable of the chemigation system and responsible for its operation or under the supervision of the responsible person, shall shut the system down and make necessary adjustments should the need arise. Prior to application ensure that the chemigation system meets the following requirements:

- The system must contain a functional check valve, vacuum relief valve, and low-pressure drain appropriately located on the irrigation pipeline to prevent water source contamination from backflow.
- The pesticide injection pipeline must contain a functional, automatic, quick closing check valve to prevent the flow of fluid back toward the injection pump.
- The pesticide injection pipeline must also contain a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.
- The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops.
- The irrigation line or water pump must include a functional pressure switch, which will stop the water pump motor when the water pressure decreases to the point where pesticide distribution is adversely affected.
- Systems must use a metering pump, such as a positive displacement injection pump (e.g. diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.

In addition to the above use rates and recommendations, the following precautions must be observed when using this product in any type of irrigation system.

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**CHEMIGATION SYSTEMS CONNECTED TO PUBLIC WATER SYSTEMS**

Public water system means a system for the provision to the public of piped water for human consumption if such system has at least 15 service connections or regularly serves an average of at least 25 individuals daily at least 60 days of the year. Chemigation systems connected to public water systems must contain a functional, reduced pressure zone, backflow preventer (RPZ) or the functional equivalent in the water supply line upstream from the point of pesticide introduction. As an option to the RPZ, the water from the public water systems should be discharged into a reservoir tank prior to pesticide introduction. There shall be a complete physical break (air gap) between the outlet end of the fill pipe and the top or overflow rim of the reservoir tank of at least twice the inside diameter of the fill pipe. The pesticide injection pipeline must contain a functional, automatic, quick closing check valve to prevent the flow of fluid back toward the injection pump. The pesticide injection pipeline must also contain a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down. The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops, or in cases where there is no water pump, when the water pressure decreases to the point where the pesticide distribution is adversely affected.

Systems must use a metering pump, such as a positive displacement injection pump (e.g. diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.

<b>FIELD USES</b>			
<b>CROP/VARIETY</b>	<b>OBJECTIVE/BENEFIT</b>	<b>USE RATE/ ACRE</b>	<b>APPLICATION TIMING</b>
Corn: Silage, Field, Popcorn, Sweet corn	To increase yield and help overcome the effects of heat or drought.	2 – 6 Grams A.I.	Apply at V3-V6 Apply up to two applications
		7.5 – 15 Grams product	
		0.3 – 0.6 Ounces product	
Note: Better results have been seen with the use of a non-ionic surfactant at 0.05% v/v.			
Corn: Silage, Field, Popcorn, Sweet corn	To increase yield and help overcome the effects of heat or drought.	2 – 6 Grams A.I.	Apply at VT in a mixture with a corn fungicide.
		5 – 15 Grams product	
		0.3 – 0.6 Ounces product	
Note: RyzUp SmartCorn™ may be mixed with Domark® 230 ME Fungicide and other corn fungicides. Better results have been seen with the use of a non-ionic surfactant at 0.05% v/v. However several corn fungicide labels (including Domark® 230 ME Fungicide) do not allow adjuvants in sprays made between V-8 (8 leaf collar) and VT (lowest branch of the tassel visible but silks have not emerged). Read and follow all use directions and restrictions of tank-mixed fungicides.			

Domark® is a registered trademark of Isagro S.p.A

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**WARRANTY AND DISCLAIMER STATEMENT**

To the fullest extent permitted by law, seller makes no warranty, express or implied, of merchantability, fitness or otherwise concerning use of this product other than as indicated on the label. User assumes all risks of use, storage or handling not in strict accordance with accompanying directions.

**CONVERSION TABLE** (for the 320 g size)

RyzUp SmartCorn™ contains approximately 10 grams of active ingredient per 25 grams of product.

Grams of Active Ingredient	Grams of ProGibb® 40%	Ounces of ProGibb® 40%
2	5	0.2
4	10	0.4
5	12.5	0.5
6	15	0.6
8	20	0.7
10	25	0.9
15	37.5	1.4
20	50	1.8
30	75	2.7
40	100	3.6
50	125	4.5
60	150	5.4
80	200	7.2
100	250	9.0
128	320	11.5

Grams of RyzUp SmartGrass® for given ppm's of Gibberellic Acid at Different Water Volumes.

Gallons of Water	Desired parts per million (ppm) gibberellic acid									
	4	5	6	8	10	15	20	30	40	50
75	1.5	3	4.5	6	7.5	11	14	21	28	35
100	2	4	6	8	10	14	19	28	38	47
125	2.5	5	7.5	9	12	18	24	35	47	59
150	3	6	9	11	14	21	28	43	57	71
200	4	8	11	15	19	28	38	57	76	95
250	5	10	14	19	24	35	47	71	95	118
300	5.5	11	17	23	28	43	57	85	113	142
400	7.5	15	23	30	38	57	76	113	151	189
500	9.5	19	28	38	47	71	95	142	189	236
600	11	23	34	45	57	85	113	170	227	284
750	14	28	43	57	71	106	142	213	284	

Note: The numbers inside the table are the Grams of RyzUp SmartCorn™ needed to obtain the desired ppm's for each gallonage.

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**Example:**

To make 250 gallons of a 40 ppm gibberellic acid solution, dissolve 95 grams of RyzUp SmartCorn™ in 250 gallons of water (see shaded area).

**CONVERSION TABLE** (for the 80 grams size)

RyzUp SmartCorn™ contains approximately 10 grams of active ingredient per 25 grams of product.

Grams of Active Ingredient	Grams of ProGibb® 40%	Ounces of ProGibb® 40%
2	5	0.2
4	10	0.4
5	12.5	0.5
6	15	0.6
8	20	0.7
10	25	0.9
15	37.5	1.4
20	50	1.8
30	75	2.7
40	100	3.6
50	125	4.5
60	150	5.4
80	200	7.2

(Alternate for 80 g packaging)

Gallons of Water	parts per million (ppm) gibberellic acid									
	4	5	6	8	10	15	20	30	40	50
75	3.0	3.8	4.5	6.0	7.5	11.3	15.0	22.5	30.0	38
100	4.0	5.0	6.0	8.0	10.0	15.0	20.0	30.0	40.0	50
125	5.0	6.3	7.5	10.0	12.5	18.8	25.0	37.5	50.0	63
150	6.0	7.5	9.0	12.0	15.0	22.5	30.0	45.0	60.0	75
200	8.0	10.0	12.0	16.0	20.0	30.0	40.0	60.0	80.0	

Note: The numbers inside the table are the grams of RyzUp SmartCorn™ needed to obtain the desired ppm's for each gallonage.

**Example:**

To make 200 gallons of a 40 ppm gibberellic acid solution, dissolve 80 Grams of RyzUp SmartCorn™ in 200 gallons of water (see shaded area).

RyzUp SmartCorn™ is a trademark of Valent BioSciences Corporation.

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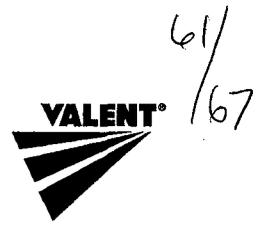
Valent BioSciences Corporation

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Libertyville, IL 60048

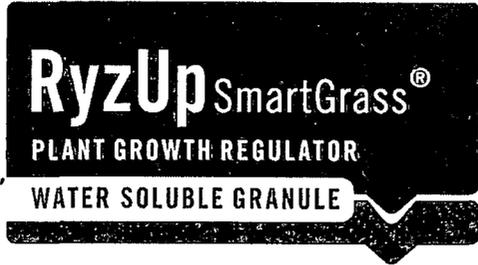
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# Supplemental Label

**ACCEPTED**



JAN 16 2013  
 Under the Federal Insecticide, Fungicide,  
 and Rodenticide Act, as amended, for  
 the pesticide registered under  
 EPA Reg. No. 73049-1

EPA Reg. No. 73049-1

(For Use In AK, AL, AR, CO, CT, DC, DE, FL, GA, HI, IA, ID, IL, IN, KS, KY, LA, MA, MD, ME, MI, MN, MO, MS, MT, NC, ND, NE, NH, NJ, NM, NV, OH, OK, OR, PA, RI, SC, SD, TN, TX, UT, VA, VT, WA, WI, WV and WY Only)

**RYZUP SMARTGRASS® PLANT GROWTH REGULATOR FOR USE ON CORN**

**DIRECTIONS FOR USE**

It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

**THIS LABELING MUST BE IN THE POSSESSION OF THE USER AT THE TIME OF APPLICATION. READ THE LABEL AFFIXED TO THE CONTAINER FOR RYZUP SMARTGRASS PLANT GROWTH REGULATOR BEFORE APPLYING. USE OF RYZUP SMARTGRASS PLANT GROWTH REGULATOR ACCORDING TO THIS LABELING IS SUBJECT TO THE USE PRECAUTIONS AND LIMITATIONS IMPOSED BY THE LABEL AFFIXED TO THE CONTAINER FOR RYZUP SMARTGRASS PLANT GROWTH REGULATOR.**

FIELD USES			
CROP/ VARIETY	OBJECTIVE/ BENEFIT	USE RATE/ ACRE	APPLICATION TIMING
Corn: Silage, Field, Popcorn, Sweet corn	To increase yield and help overcome the effects of heat or drought.	7.5 - 15 grams product 0.3 - 0.6 ounces product	Apply at V3-V6 Apply up to two applications
Note: Better results have been seen with the use of a non-ionic surfactant at 0.05% v/v.			
Corn: Silage, Field, Popcorn, Sweet corn	To increase yield and help overcome the effects of heat or drought.	7.5 - 15 grams product 0.3 - 0.6 ounces product	Apply at VT in a mixture with a corn fungicide.
Note: RyzUp SmartGrass may mixed with Domark® and other maize fungicides. Better results have been seen with the use of a non-ionic surfactant at 0.05% v/v.			

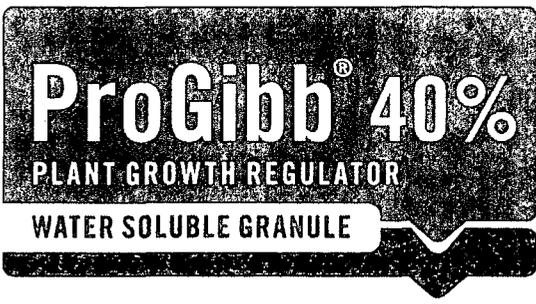
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**Supplemental Label**



**ACCEPTED**  
IAN 16 2013

Under the Federal Insecticide, Fungicide, and Rodenticide Act, as amended, for the pesticide registered under EPA Reg. No. 73049-1

EPA Reg. No. 73049-1

(For Use In AK, AL, AR, CO, CT, DC, DE, FL, GA, HI, IA, ID, IL, IN, KS, KY, LA, MA, MD, ME, MI, MN, MO, MS, MT, NC, ND, NE, NH, NJ, NM, NV, OH, OK, OR, PA, RI, SC, SD, TN, TX, UT, VA, VT, WA, WI, WV and WY Only)

**ProGibb® 40% PLANT GROWTH REGULATOR FOR USE ON SOYBEAN**

**DIRECTIONS FOR USE**

It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

**THIS LABELING MUST BE IN THE POSSESSION OF THE USER AT THE TIME OF APPLICATION. READ THE LABEL AFFIXED TO THE CONTAINER FOR PROGIBB 40% PLANT GROWTH REGULATOR BEFORE APPLYING. USE OF PROGIBB 40% PLANT GROWTH REGULATOR ACCORDING TO THIS LABELING IS SUBJECT TO THE USE PRECAUTIONS AND LIMITATIONS IMPOSED BY THE LABEL AFFIXED TO THE CONTAINER FOR PROGIBB 40% PLANT GROWTH REGULATOR.**

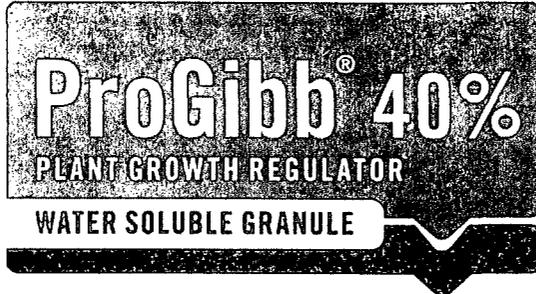
CROP/VARIETY	OBJECTIVE/BENEFIT	USE RATE/ACRE	APPLICATION TIMING
Soybean	To improve mechanical harvest efficiency by elongating the first and second internode of young plants.	1 – 20 Grams A.I.  2 – 50 Grams product  0.1 – 1.8 Ounces product	V1-V4: Apply 1-2 applications as a foliar broadcast spray during growth stages V1-V4 (1-2 sets of unfolded trifoliolate leaves). If applying as a banded spray, reduce rates accordingly. Complete coverage of leaf tissue is essential. Make applications in 20-40 gallons water/A.I.
Note: Differences in response by variety may be large. Caution should be used when using on untested varieties.			
	To enhance post-emergence grass control.	1 – 20 Grams A.I. 2 – 50 Grams product  0.1 – 1.8 Ounces product.	V2-R5: Apply with SelectMax® herbicide for enhanced control of Johnsongrass and volunteer corn in soybeans.



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# Supplemental Label



## ACCEPTED

JAN 16 2013

Under the Federal Insecticide, Fungicide, and Rodenticide Act, as amended, for the pesticide registered under EPA Reg. No. 73049-1

EPA Reg. No. 73049-1

(For Use In AK, AL, AR, CO, CT, DC, DE, FL, GA, HI, IA, ID, IL, IN, KS, KY, LA, MA, MD, ME, MI, MN, MO, MS, MT, NC, ND, NE, NH, NJ, NM, NV, OH, OK, OR, PA, RI, SC, SD, TN, TX, UT, VA, VT, WA, WI, WV and WY Only)

### ProGibb® 40% PLANT GROWTH REGULATOR FOR USE ON SOIL FOR PRE-PLANT BURNDOWN

#### DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

**GENERAL PRE-PLANT USE:** For Use in pre-plant burndown herbicide applications.

USE	OBJECTIVE/BENEFIT	RATE/ACRE	APPLICATION TIMING
Soil application			
	To promote early Palmer amaranth and/or waterhemp seed germination to better synchronize their sensitivity.	5 – 20 Grams A.I 12 – 50 Grams product  0.4 – 1.8 Ounces product.	Apply with a pre-emergence herbicide that has activity on Palmer amaranth and/or waterhemp (e.g. Valor®, Valor® XLT, Gangster®, and Fierce®).

Valor®, Valor® XLT, Gangster®, and Fierce® are registered trademarks of Valent USA Corporation.

**THIS LABELING MUST BE IN THE POSSESSION OF THE USER AT THE TIME OF APPLICATION. READ THE LABEL AFFIXED TO THE CONTAINER FOR PROGIBB 40% PLANT GROWTH REGULATOR BEFORE APPLYING. USE OF PROGIBB 40% PLANT GROWTH REGULATOR ACCORDING TO THIS LABELING IS SUBJECT TO THE USE PRECAUTIONS AND LIMITATIONS IMPOSED BY THE LABEL AFFIXED TO THE CONTAINER FOR PROGIBB 40% PLANT GROWTH REGULATOR.**

**PLEASE CONTACT VALENT U.S.A. CORPORATION AT 800-6-VALENT (682-5368) TO DETERMINE IF THIS USE IS REGISTERED IN YOUR STATE.**

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Registered by:  

**VALENT BIOSCIENCES.**  
 CORPORATION  
 870 Technology Way  
 Libertyville, IL 60048 U.S.A.

Distributed by:  
**Valent U.S.A. Corporation**  
 P.O. Box 8025  
 Walnut Creek, CA 94596-8025  
 www.valent.com

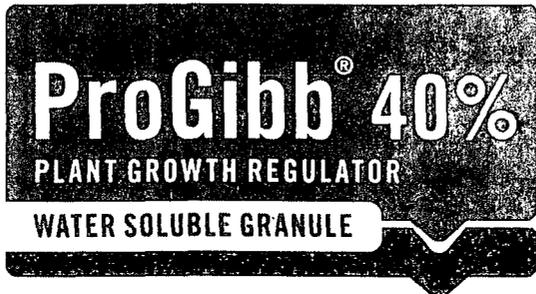
Made in U.S.A.  
 Form: 2012



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# Supplemental Label

## ACCEPTED



JAN 16 2013  
Under the Federal Insecticide, Fungicide,  
and Rodenticide Act, as amended, for  
the pesticide registered under  
EPA Reg. No. 73049-1

EPA Reg. No. 73049-1  
(For Use In HI Only)

### ProGibb® 40% PLANT GROWTH REGULATOR FOR USE ON COFFEE

#### DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

**THIS LABELING MUST BE IN THE POSSESSION OF THE USER AT THE TIME OF APPLICATION. READ THE LABEL AFFIXED TO THE CONTAINER FOR PROGIBB 40% PLANT GROWTH REGULATOR BEFORE APPLYING. USE OF PROGIBB 40% PLANT GROWTH REGULATOR ACCORDING TO THIS LABELING IS SUBJECT TO THE USE PRECAUTIONS AND LIMITATIONS IMPOSED BY THE LABEL AFFIXED TO THE CONTAINER FOR PROGIBB 40% PLANT GROWTH REGULATOR.**

CROP / VARIETY	OBJECTIVE/BENEFIT	USE RATE/ACRE	APPLICATION TIMING
Coffee	To induce flower bud break	10 – 50 Grams A.I.  25 – 125 Grams product  0.9 – 4.5 oz product	Apply in sufficient water volume to assure total coverage of developing buds along all laterals (arrange nozzles for coverage from bottom up as well as top down of laterals and leaves). Multiple applications at 3 to 7 day frequency may be required over a period of 10 to 14 days Use a non-ionic surfactant at 0.05% v/v to enhance performance.

**PLEASE CONTACT VALENT U.S.A. CORPORATION AT 800-6-VALENT (682-5368) TO DETERMINE IF THIS USE IS REGISTERED IN YOUR STATE.**

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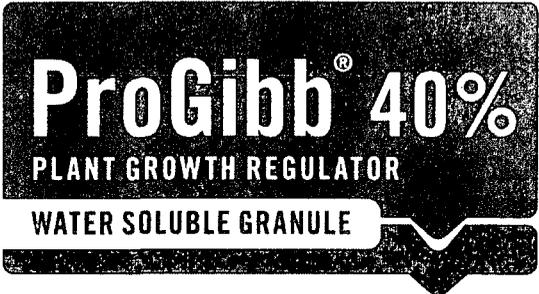
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 P.O. Box 8025  
 Walnut Creek, CA 94596-8025  
 www.valent.com

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671  
/67



# Supplemental Label



## ACCEPTED

JAN 16 2013

Under the Federal Insecticide, Fungicide,  
and Rodenticide Act, as amended, for  
the pesticide registered under  
EPA Reg. No.

73049-1

EPA Reg. No. 73049-1  
(For Use In FL Only)

### ProGibb® 40% PLANT GROWTH REGULATOR FOR USE ON AVOCADO

#### DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

**THIS LABELING MUST BE IN THE POSSESSION OF THE USER AT THE TIME OF APPLICATION. READ THE LABEL AFFIXED TO THE CONTAINER FOR PROGIBB 40% PLANT GROWTH REGULATOR BEFORE APPLYING. USE OF PROGIBB 40% PLANT GROWTH REGULATOR ACCORDING TO THIS LABELING IS SUBJECT TO THE USE PRECAUTIONS AND LIMITATIONS IMPOSED BY THE LABEL AFFIXED TO THE CONTAINER FOR PROGIBB 40% PLANT GROWTH REGULATOR.**

CROP/VARIETY	OBJECTIVE/BENEFIT	USE RATE/ACRE	APPLICATION TIMING
Avocado  (Not for use in California)	To improve fruit set and yield	25 Grams A.I.  65 Grams product  2.2 oz product	Apply at the cauliflower stage of inflorescence development.

**PLEASE CONTACT VALENT U.S.A. CORPORATION AT 800-6-VALENT (682-5368) TO DETERMINE IF THIS USE IS REGISTERED IN YOUR STATE.**

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Registered by:  

**VALENT BIOSCIENCES.**  
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 870 Technology Way  
 Libertyville, IL 60048 U.S.A.

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